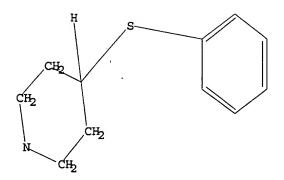
```
10/500,517
```

Connecting via Winsock to STN

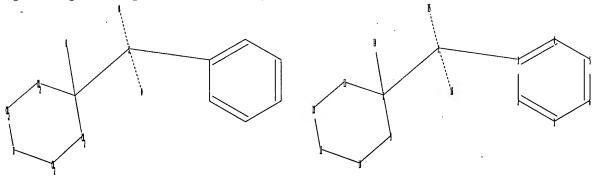
Welcome to STN International! Enter x:x FILE 'HOME' ENTERED AT 10:37:58 ON 14 MAR 2007 => file reg Uploading C:\Program Files\Stnexp\Queries\500517.str chain nodes : 7 14 ring nodes : 1 2 3 4 5 6 8 9 10 11 12 13 chain bonds : 3-7 7-8 8-14 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-13 9-10 10-11 11-12 12-13 exact/norm bonds : 3-7 7-8 8-9 8-13 9-10 10-11 11-12 12-13 exact bonds : 8-14 normalized bonds : 1-2 1-6 2-3 3-4 4-5 5-6 Match level : 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:CLASS L1STRUCTURE UPLOADED => d l1 L1 HAS NO ANSWERS



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full L2 1432 SEA SSS FUL L1

Uploading C:\Program Files\Stnexp\Queries\17.str



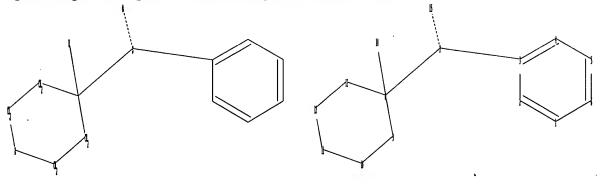
chain nodes :
7 14 15 16
ring nodes :
1 2 3 4 5 6 8 9 10 11 12 13
chain bonds :
3-7 7-8 7-15 7-16 8-14
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-13 9-10 10-11 11-12 12-13
exact/norm bonds :
3-7 7-8 7-15 7-16 8-9 8-13 9-10 10-11 11-12 12-13
exact bonds :
8-14
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:CLASS 15:CLASS 16:CLASS

L3 STRUCTURE UPLOADED

=>

Uploading C:\Program Files\Stnexp\Queries\517.str



chain nodes : 7 14 15

ring nodes :

1 2 3 4 5 6 8 9 10 11 12 13

chain bonds :

3-7 7-8 7-15 8-14

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-13 9-10 10-11 11-12 12-13

exact/norm bonds :

3-7 7-8 7-15 8-9 8-13 9-10 10-11 11-12 12-13

exact bonds :

8-14

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:CLASS 15:CLASS

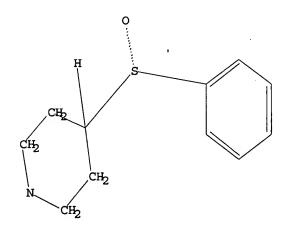
L4 STRUCTURE UPLOADED

=> d 13

L3 HAS NO ANSWERS

L3 STR

Structure attributes must be viewed using STN Express query preparation.



Structure attributes must be viewed using STN Express query preparation.

Page 4

```
=> s 18
L9
          111 L8
=> s 19 and py<2001
      20212751 PY<2001
L10
           57 L9 AND PY<2001
=> s 19 and py<2002
      21016548 PY<2002
           66 L9 AND PY<2002
L11
=> d ibib abs fhitstr 1-66
L11 ANSWER 1 OF 66 CA COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                        145:397368 CA
                        Preparation of sulfonyl aryl or heteroaryl hydroxamic
TITLE:
                        acid compounds as matrix metalloprotease inhibitors
                        Bedell, Louis J.; Mcdonald, Joseph J.; Barta, Thomas
INVENTOR(S):
                        E.; Becker, Daniel P.; Shashidhar, Rao N.; Freskos,
                        John N.; Mischke, Brent V.; Getman, Daniel P.;
                        Decrescenzo, Gary A.; Villamil, Clara I.
                        G. D. Searle & Co., USA
PATENT ASSIGNEE(S):
                        U.S., 162pp., Cont.-in-part of U.S. Ser. No. 310,813.
SOURCE:
                        CODEN: USXXAM
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
                        11
PATENT INFORMATION:
                        KIND DATE
                                         APPLICATION NO.
                                                                  DATE
     PATENT NO.
     ______
                        ----
                                          ------
                                                                  _____
    US 7115632
                         B1
                               20061003
                                          US 2000-569034
                                                                  20000511
                                          US 1999-230209
    US 2001020021
                        A1
                               20010906
                                                                  19990624 <--
    US 6380258
                         B2
                               20020430
                                           WO 2001-US14706
                                                                  20010507 <--
    WO 2001085680
                        A2
                               20011115
    WO 2001085680
                         A3
                               20020307
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                           US 2001-909227
                                                                  20010719
     US 2003073845
                         A1
                               20030417
     US 6696449
                         B2
                               20040224
PRIORITY APPLN. INFO.:
                                           US 1999-310813
                                                               B2 19990512
                                           US 1999-230209
                                                               A2 19990624
                                           US 1997-35182P
                                                              P 19970304
                                           WO 1998-US4300
                                                              W 19980304
```

US 2000-569034

US 2000-728408

A 20000511

A2 20001201

OTHER SOURCE(S): MARPAT 145:397368

GI

10/500,517

$$R^{20}$$
 S^{02}
 N
 $A-R-E-Y$

The title compds. [I; A = O, S, CO2, etc.; R = alkyl, alkoxyalkyl, aryl, AB etc.; E = CO, SO2, (un) substituted CONH, etc.; Y = H, alkyl, alkoxy, etc.; R5, R6 = H, alkyl, cycloalkyl, etc.; R20 = OR21, NR13OR22, etc. (R13 = H, alkyl, benzyl; R21 = alkyl, aryl, arylalkyl; R22 = selectively removable protecting group)] or pharmaceutically acceptable salts thereof that inter alia inhibit matrix metalloprotease activity, are prepared Thus, thioetherification of 4-phenoxybenzenethiol with 2-fluorobenzaldehyde in the presence of K2CO3 in isopropanol under reflux for 20 h gave 2-(4-phenoxyphenylthio)benzaldehyde which was condensed with tetra-Et dimethylaminomethylenediphosphonate in the presence of NaH in THF at room temperature for 4 h gave to 2-[2-(4-phenoxyphenylthio)phenyl]acetic acid (II). II was oxidized by H2O2 in acetic acid to 2-[2-(4phenoxyphenylsulfonyl)phenyl]acetic acid which was condensed with O-tetrahydropyranylhydroxylamine using 1-ethyl-3-(3dimethylaminopropyl)carbodiimide hydrochloride in MeCN followed by treatment with p-toluenesulfonic acid in methanol at room temperature for 2 h

I

give N-hydroxy-2-[2-(4-phenoxyphenylsulfonyl)phenyl]acetamide (III). III and N-hydroxy-2,3-dimethoxy-6-[[4-[4-(trifluoromethyl)phenoxy]-1-piperidinyl]sulfonyl]benzamide showed IC50 of >10,000 nM against MMP-1, 0.3 and 2.4 nM, resp., against MMP-2, and 2 and 2.7 nM, resp., against MMP-13. Also disclosed is a treatment process that comprises administering a contemplated sulfonyl aromatic or heteroarom. ring hydroxamic acid compound in a matrix metalloprotease (MMP) enzyme-inhibiting effective amount to a host having a condition associated with pathol. MMP activity. 308385-58-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonyl aryl or heteroaryl hydroxamic acid compds. as matrix metalloprotease inhibitors)

RN 308385-58-2 CA

Benzamide, N-hydroxy-2,3-dimethoxy-6-[[4-(phenylthio)-1-piperidinyl]sulfonyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

to

IT

CN

```
L11 ANSWER 2 OF 66 CA COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         141:38534 CA
                        Preparation of aromatic sulfone hydroxamic acid
TITLE:
                        metalloprotease inhibitors
                        Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.;
INVENTOR (S):
                        Boehm, Terri L.; Carroll, Jeffrey N.; Decrescenzo,
                        Gary A.; Fobian, Yvette M.; Freskos, John N.; Getman,
                        Daniel P.; McDonald, Joseph J.; Li, Madeleine H.;
                        Hockerman, Susan L.; Howard, Susan C.; Kolodziej,
                         Steve A.; Mischke, Deborah A.; Rico, Joseph G.;
                         Stehle, Nathan W.; Tollefson, Michael B.; Vernier,
                        William F.; Villamil, Clara I.
PATENT ASSIGNEE(S):
                         Pharmacia Corporation, USA
                        U.S., 403 pp., Cont.-in-part of U.S. Ser. No. 311,837.
SOURCE:
                        CODEN: USXXAM
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
                        5
PATENT INFORMATION:
     PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
                                           -----
                                                                  -----
     -----
                       ----
                               -----
                                         US 2000-570731
US 1998-191129
     US 6750228
                                                                  20000512
                        B1
                               20040615
                                                                 19981113 <--
                        A1
     US 2001014688
                               20010816
                        A1
                               20011108 US 1999-256948
                                                                 19990224 <--
     US 2001039287
                        A1 20001123 CA 2000-2372934 20000515 <--
A1 20001123 WO 2000-US6719 20000515 <--
                        A1
     CA 2372934
     WO 2000069821
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
            CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
            ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
            SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                         A1 20020306 EP 2000-930088
                                                                  20000515
     EP 1183239
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     HU 200201680
                                           HU 2002-1680
                               20020928
                                                                  20000515
                         A2
                                           BR 2000-10562
                         Α
                                                                  20000515
     BR 2000010562
                               20030610
                         Т
                                           JP 2000-618238
     JP 2003520196
                               20030702
                                                                  20000515
                         B2
                                           AU 2000-47970
                               20031023
                                                                  20000515
     AU 766792
                        Α .
     NZ 515217
                               20040430
                                           NZ 2000-515217
                                                                  20000515
                        A1
                                           US 2001-954451
                                                                  20010917
     US 2002177588
                               20021128
                        B2
                               20040615
     US 6750233
                        A
                                           ZA 2001-9006
                                                                  20011031
     ZA 2001009006
                               20021202
                        A
                                           NO 2001-5543
     NO 2001005543
                               20020110
                                                                  20011113
                        A1
                               20030417
                                           US 2001-989943
                                                                  20011121
     US 2003073718
                         B2
     US 6683093
                               20040127
                        A1
                               20041021
                                           US 2003-730403
                                                                  20031208
     US 2004209914
                        A1
                               20041125
                                           US 2003-747796
                                                                  20031229
     US 2004235818
                                                               P 19971114
                                           US 1997-66007P
PRIORITY APPLN. INFO.:
                                                              P 19980804
                                           US 1998-95347P
                                                              P 19980918
                                           US 1998-101080P
                                                               B2 19990224
                                           US 1999-256948
                                                              A2 19990514
                                           US 1999-311837
                                                              P 19980806
                                           US 1998-95501P
                                           US 1998-186410
                                                              B2 19981105
                                                               B2 19981113
                                           US 1998-191129
```

US 2000-570731

A 20000512

WO 2000-US6719 W US 2001-989943

20000515 A3 20011121

OTHER SOURCE(S):

MARPAT 141:38534

GI

A treatment process is disclosed that comprises administering an effective AB amount of an aromatic sulfone hydroxamic acid I [W = H, cation, certain acyl or thioacyl groups; m, n, p = 0-2; (m+n+p) = 1 to 4; Z = (un) substituted NH; X, Y = (un) substituted CH2; A = bond, O, S, (un) substituted NH, COO, OCO, CH:CH, C.tplbond.C, N:N, NHNH, NHCOO, (un) substituted CONH, NHCO, etc.; R = alkylene, arylene, heteroarylene, etc., with provisos; E = bond, CONH, NHCO, CO, SO2, NHSO2, SO2NH, S, etc.; Y2 = absent, H, alkyl, alkoxy, aryl, aryloxy, heteroaryl, etc.] to a host having a condition associated with pathol. matrix metalloprotease (MMP) activity. I exhibit excellent inhibitory activity of one or more MMP enzymes, such as MMP-2, MMP-9 and MMP-13, while exhibiting substantially less inhibition of (at least) MMP-1 (biol. data given). Also disclosed are metalloprotease inhibitor compds. having such selective activities, processes for manufacture of such compds., and pharmaceutical compns. using such inhibitors. The compds. are potentially useful against a wide variety of conditions, notably as antiosteoarthritic, antiangiogenesis, and antitumor agents. Over 900 example compds. are listed, most with supporting phys. data, and many with synthetic details. E.g., a multi-step synthesis of the compound II.2HCl was given.

I ·

II

308825-68-5P TT

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(drug candidate; preparation of aromatic sulfone hydroxamic acids as metalloprotease inhibitors)

RN 308825-68-5 CA

4-Piperidinecarboxamide, 1-cyclopropyl-N-hydroxy-4-[[4-[4-(phenylthio)-1-CN piperidinyl]phenyl]sulfonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

REFERENCE COUNT:

54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 66 CA

ACCESSION NUMBER:

TITLE:

COPYRIGHT 2007 ACS on STN

138:304308 CA

Preparation of sulfonyl aryl hydroxamates and their

use as matrix metalloprotease inhibitors

Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.; Decrescenzo, Gary A.; Freskos, John N.; Getman, Daniel

P.; McDonald, Joseph J.; Mischke, Brent V.; Rao,

Shashidhar N.; Villamil, Clara I.

PATENT ASSIGNEE(S):

SOURCE:

Pharmacia Corp., USA U.S. Pat. Appl. Publ., 148 pp., Cont.-in-part of U.S.

Ser. No. 569,034.

CODEN: USXXCO

DOCUMENT TYPE:

INVENTOR(S):

LANGUAGE:

Patent English

11 FAMILY ACC. NUM. COUNT:

PA'	TENT	NO.			KIN		DATE		,	APPL	ICAT	ION	NO.		D	ATE		
US	2003	0738					2003	 0417		US 2	001-	9092:	27		2	0010	 719	
US	6696	449			B2		2004	0224										
WO	9838	859			A1		1998	0911		WO 1:	998-1	US43	00		1	9980	304	<
	W:	AL,	AU,	BA,	BB,	BG,	BR,	CA,	CN,	CU,	CZ,	EE,	GE,	GH,	GW,	HU,	ID,	
										LT,								
								•	•	UA,		-		-		-	•	
			-	-	RU,	•	•		•	•	•	•				Α.	•	
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	
		FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	
								TD,		•		•				•	-	
US	2001	0200	21		A1		2001	0906	•	US 1:	999-	2302	09		1	9990	624	<
US	6380	258			B2	•	2002	0430										
US	7115	632			В1		2006	1003		US 2	000-	5690	34		2	0000	511	
US	2003	1913	17		~A1		2003	1009		US 2	000-	7284	80		2	0001	201	
US	6794	511			B2	•	2004	0921										
CA	2453	613			A1	:	2003	0130		CA 2	002-	2453	513		2	0020	719	
WO	2003	0079	54		A2		2003	0130	1	WO 2	002-1	US23:	219		2	0020	719	
WO	2003	0079	54		A3		2003	1023										
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
										EC,								
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
										MN,								
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW								

```
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                20030303
                                            AU 2002-326432
    AU 2002326432
                          A1
                                                                    20020719
                                20040414
                                            EP 2002-761148
                                                                    20020719
    EP 1406626
                          A2
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
         R:
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                                20040713
                                            BR 2002-11430
                                                                    20020719
    BR 2002011430
                          Α
                          Т
                                20050127
                                            JP 2003-513561
                                                                    20020719
     JP 2005502632
                                            US 1997-35182P
                                                                    19970304
PRIORITY APPLN. INFO.:
                                                                 P
                                            WO 1998-US4300
                                                                 W
                                                                    19980304
                                            US 1999-310813
                                                                 B2 19990512
                                            US 1999-230209
                                                                 A2 19990624
                                            US 2000-569034
                                                                 A2 20000511
                                            US 2000-728408
                                                                 A2 20001201
                                            US 2001-909227
                                                                    20010719
                                                                 Α
                                             WO 2002-US23219
                                                                 W
                                                                    20020719
```

Ι

OTHER SOURCE(S):

MARPAT 138:304308

GΙ

$$HO-N = 0$$

$$S-N = A-R-E-Y$$

$$R^{5}$$

$$R^{6}$$

AΒ Title compds. I [W = 6-membered heterocycle containing the sulfonyl bonded N; A-R-E-Y = 4-substituent; A = 0, S00-2, etc.; R = alkyl, alkoxyalkyl, aryl, heteroaryl, cycloalkyl, etc.; E = absent , bond, CO, SO2, etc.; Y = absent, H, OH, CN, NO2, alkyl, haloalkyl, aminoalkyl; R5-6 = together with the atoms to which they are bonded, form an aliphatic or aromatic carbocyclic

heterocyclic ring having 5-7 members] are prepared Over 50 synthetic examples are disclosed. For example, phthalide is reacted with 4-(phenoxy)benzenethiol (DMF, K2CO3, 100°C, 2 h) and the resulting product converted to the hydroxamic acid (CH2Cl2, ClCOCOCl, DMF (cat), TMSONH2, 0°C, 1.5 h) followed by oxidation (CH2Cl2, mCPBA, room temperature, 3 h) to II. II has IC50 = 10 nM for MMP-2, 45 nM for MMP-13 and >10,000 nM for MMP-1. I are inhibitors of MMP and angiogenesis.

IT 308385-58-2P

or

CN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(use of sulfonyl aryl or heteroaryl hydroxamic acids and derivs. as aggrecanase inhibitors)

RN308385-58-2 CA

Benzamide, N-hydroxy-2,3-dimethoxy-6-[[4-(phenylthio)-1piperidinyl]sulfonyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 4 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

136:340996 CA

TITLE:

Preparation of sulfamides as metalloprotease

inhibitors

INVENTOR(S):

Broka, Chris Allen; Campbell, Jeffrey Allen; Castelhano, Arlindo Lucas; Chen, Jian Jeffrey; Hendricks, Robert Than; Melnick, Michael Joseph;

Walker, Keith Adrian Murray

PATENT ASSIGNEE(S):

Syntex (U.S.A.) LLC, USA; Agouron Pharmaceuticals,

Inc.

Patent

SOURCE:

U.S., 47 pp., Cont.-in-part of U.S. 6,143,744.

CODEN: USXXAM

DOCUMENT TYPE:

English LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA	TENT NO.			KINI	DAT:	Ε	API	PLICAT	ION N	o.		D	ATE		
US	6376506			B1	200	20423	US	1999-4	46967	'7		19	9991	222	
CA	2278694			A1	199	30730	CA	1998-2	22786	94		19	9980	114	<
				C	200	50926									
	9866140					30818	AU	1998-6	56140)		19	9980	114	<
,AU	730127			B2	200	10222									
ΕP	958287			A1	199	91124	EP	1998-9	90794	3		19	9980	114	<
EΡ	958287			B1	200	20911									
	R: AT, E	ΒE,	CH,	DE,	DK, ES	, FR,	GB, GI	R, IT,	LI,	LŲ,	ΝL,	SE,	MC,	PT,	•
	IE, S	SI,	LT,	LV,	FI, RO										
BR	9807508			Α	200	00321	BR	1998-1	7508			19	9980	114	<
NZ	336625			Α	200	10427	NZ	1998-3	33662	:5		19	9980	114	<
HU	200000941			A2	200	10428	HU	2000-9	941			19	9980	114	<
JP	2001523222	2		${f T}$	200	11120	JP	1998-5	53153	7		19	9980	114	<
JP	3563411			B2	200	10908									
ΑT	223909			${f T}$	200	20915	AT	1998-9	90794	3		19	980:	114	
ZA	9800376			Α	199	30723	ZA	1998-3	376			19	9980:	116	<
US	5998412			Α	199	91207	US	1998-9	9951			19	980:	121	<
NO	9903587			Α	199	90922	NO	1999-3	3587			19	9990	722	<
NO	313635			B1	200	21104									
MX	9906822			A	200	00131	MX	1999-6	5822			19	9990	722	<
US	6130220			Α	200	01010	US	1999-3	36967	7		19	99908	305	<
	•														

20001107 US 1999-369501 19990805 <--US 6143744 19970123 US 1997-36714P р PRIORITY APPLN. INFO.: US 1997-62209P 19971016 P US 1998-9951 A3 19980121 US 1999-369501 A2 19990805 W 19980114 WO 1998-EP180

MARPAT 136:340996 OTHER SOURCE(S):

Sulfamides RCOCR1R2NR3SO2NR4R5 [R = OH, NHOH or N/O-alkyl or -aryl derivs.; R1, R2, R3 = H, alkyl, alkenyl, haloalkyl, cycloalkyl, cycloalkylalkyl, (hetero)aryl, acylalkyl, etc.; R1R2C may be a (hetero) carbocycle or R3 together with R1 or R2 form a heterocycloamino group; R4, R5 = H, alkyl, heteroalkyl, cycloalkyl, cycloalkylalkyl, aryl, (hetero)aralkyl or -aralkenyl; R4R5N may be a heterocycloamino group or R4 or R5 together with R3 forms an alkylene group (with provisos)], as individual isomers or mixts. of isomers, or their pharmaceuticallyacceptable salts or prodrugs were prepared as inhibitors of metalloproteases. Thus, 2-(R)-[(1,2,3,4-tetrahydro-β-carbolino-2sulfonyl)amino]propionic acid (claimed compound) was prepared by treating D-alanine Me ester hydrochloride with chlorosulfonyl isocyanate/2chloroethanol, reaction of the oxazolidone formed with 1,2,3,4-tetrahydro-β-carboline, and saponification Metalloprotease and TNF- α inhibitory test data are tabulated.

210913-65-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

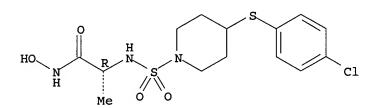
(preparation of sulfamides as metalloprotease inhibitors)

RN 210913-65-8 CA

REFERENCE COUNT:

Propanamide, 2-[[[4-[(4-chlorophenyl)thio]-1-piperidinyl]sulfonyl]amino]-N-CN hydroxy-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



23

ACCESSION NUMBER:

L11 ANSWER 5 OF 66 CA

136:247481 CA

TITLE: Synthesis and biological activities of new 5-HT2A

COPYRIGHT 2007 ACS on STN

selective ligands N-substituted-piperidinyl-4-

THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

phenylthioether and sulfone derivatives

Wang, Hao; Wen, Ren; Huang, Lei; Innis, Robert B.; AUTHOR(S):

Tan, Pingzhong

CORPORATE SOURCE: Department of Medical Chemistry, Fudan University,

Shanghai, 200032, Peop. Rep. China

SOURCE: Yaoxue Xuebao (2001), 36(4), 274-277

CODEN: YHHPAL; ISSN: 0513-4870

PUBLISHER: Yaoxue Xuebao Bianjibu

Journal DOCUMENT TYPE: Chinese LANGUAGE:

OTHER SOURCE(S): CASREACT 136:247481 GI

Title compound I (X = SO2, SO, S), a new 5-HT2A selective ligands, were AB synthesized from 2,3-dimethoxythiophenol via etherification, oxidation, acid hydrolysis, and alkylation. Their affinities to 5-HT2A, 5-HT 2C, 5-HT6, and 5-HT7 receptors and some other nervous transmitter receptors in vitro were determined The three compds. had relatively high selectivity for 5- HT2A receptor in vitro. The results showed that some sulfur-containing analogs of MDL 100907 showed selective affinity to 5-HT2A receptor. ΙT

403848-69-1P RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (synthesis and biol. activities of new 5-HT2A selective ligands N-substituted-piperidinyl-4-phenylthioether and sulfone derivs.)

RN403848-69-1 CA

Piperidine, 4-[(2,3-dimethoxyphenyl)thio]-1-[2-(4-fluorophenyl)ethyl]-CN (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} & & \\ \text{MeO} & & \\ \end{array}$$

L11 ANSWER 6 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

135:371526 CA

TITLE:

Preparation of sulfonyl aryl or heteroaryl hydroxamic

acid compounds as inhibitors of matrix

metalloproteinase

INVENTOR(S):

Bedell, Louis J.; Mconald, Joseph; Barta, Thomas E.; Becker, Daniel P.; Rao, Shashidhar N.; Freskos, John N.; Mischke, Brent V.; Getman, Daniel P.; Decrescenzo,

Gary A.; Villamil, Clara I.

PATENT ASSIGNEE (S): SOURCE:

Pharmacia Corporation, USA PCT Int. Appl., 374 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 11

PATENT INFORMATION:

KIND DATE PATENT NO. APPLICATION NO. DATE ---------------A2 WO 2001085680 20011115 WO 2001-US14706 20010507 <--**A3** WO 2001085680 20020307 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

```
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                20061003
                                            US 2000-569034
                                                                    20000511
     US 7115632
                          B1
                                                                 A 20000511
                                            US 2000-569034
PRIORITY APPLN. INFO.:
                                            US 1999-310813
                                                                 B2 19990512
                                            US 1999-230209
                                                                 A2 19990624
OTHER SOURCE(S):
                         MARPAT 135:371526
```

GΙ

Title compds. I [W = 5-, 6-membered aromatic or heteroarom. ring; R1 = a AB substituent containing a 5- or 6-membered cyclohydrocarbyl, heterocyclo, aryl or heteroaryl radical that is bonded directly to the depicted SO2-group said R1 with certain steric requirements; R5-6 = H, alkyl, cycloalkyl, acylalkyl, halo, nitro, hydroxy, cyano, alkoxy, haloalkyl, haloalkyloxy, hydroxyalkyl, etc. or R5-6 together with the atoms to which they are bonded form a further aliphatic or aromatic carbocyclic or heterocyclic ring having 5-to 7-members; R20 = OR21, where R21 = H, alkyl, aryl, arylalkyl, NR13OR22, where R22 = a selectively removable protecting group and R13 = H, alkyl, benzyl group, etc.] were prepared Over 50 synthetic examples were disclosed. For example, phthalide was reacted with 4-(phenoxy)benzenethiol (DMF, K2CO3, 100°C, 2 h) and the resulting product converted to the hydroxamic acid (CH2Cl2, ClCOCOCl, DMF (cat), TMSONH2,0°C, 1.5 h) followed by oxidation (CH2Cl2, mCPBA, room temperature, 3 h) to II. II had IC50 = 10 nM for MMP-2, 45 nM for MMP-13 and >10,000 nM for MMP-1. I are inhibitors of MMP and angiogenesis. IT 308385-58-2P, N-Hydroxy-2,3-dimethoxy-6-[[4-(phenylthio)piperidin-1-yl]sulfonyl]benzamide RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; preparation of sulfonyl aryl or heteroaryl hydroxamic acid compds. as

inhibitors of matrix metalloproteinase)

RN 308385-58-2 CA

CN Benzamide, N-hydroxy-2,3-dimethoxy-6-[[4-(phenylthio)-1-piperidinyl]sulfonyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 7 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

TITLE:

135:318419 CA Synthesis of substituted bipiperidines and their use

as H1 antagonists

INVENTOR(S):

Lawrence, Louise; Rigby, Aaron; Sanganee, Hitesh;

Springthorpe, Brian Astrazeneca AB, Swed.

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 160 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
		WO 2001 CE751	20010405
		WO 2001-SE751	
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY, BZ	CA, CH, CN,
CO, CR, CU,	CZ, DE, DR, DM,	DZ, EE, ES, FI, GB, GI	, GE, GH, GN,
		KE, KG, KP, KR, KZ, LC	
		MN, MW, MX, MZ, NO, NZ	
		TJ, TM, TR, TT, TZ, UF	1, UG, US, UZ,
VN, YU, ZA,		or or me ue eu an	DE CH CV
		SL, SZ, TZ, UG, ZW, AT	
		IE, IT, LU, MC, NL, PT	
		GW, ML, MR, NE, SN, TI	
CA 2403012	A1 20011018	CA 2001-2403012	20010405 <
		EP 2001-920053	20010405
EP 1274701			CP MC PM
		GB, GR, IT, LI, LU, NI	, SE, MC, PI,
	LV, FI, RO, MK,		20010405
BR 2001009922	A 20030218	BR 2001-9922	20010405
CN 1433411	A 20030/30	CN 2001-810883	20010403
JP 2003530393	T 20031014	JP 2001-575574	20010405
NZ 521543	A 20041029	NZ 2001-521543	20010405
		EP 2004-20599	
		GB, GR, IT, LI, LU, NI	, SE, MC, PT,
IE, SI, FI,	•		00070405
AT 298748	T 20050715		
CN 1660839			
US 2002077337			20010406
US 6525070	B2 20030225		
ZA 2002007700	A 20040102	ZA 2002-7700	20020925
NO 2002004774	A 20021129	NO 2002-4774	20021003

US 6903115 B2 20050607	30113 30513 30514 50310
	30514
US 2004014783 A1 20040122 US 2003-436582 200	30514
HK 1051193 A1 20051028 HK 2003-103424 200	50310
US 2005171092 A1 20050804 US 2005-76773 200	
US 7179922 B2 20070220	
PRIORITY APPLN. INFO.: GB 2000-8626 A 200	00408
GB 2000-19111 A 200	00803
SE 2000-3664 A 200	01011
CN 2001-810683 A3 200	10405
EP 2001-920053 A3 200	10405
WO 2001-SE751 W 200	10405
US 2001-827488 A3 200	10406
US 2003-341027 A1 200	30113
US 2003-436582 A3 200	30513

OTHER SOURCE(S):

MARPAT 135:318419

GΙ

$$\begin{array}{c|c} C1 & & & \\ & & \\ C1 & & \\ & & \\ \end{array}$$

AB Title compds. I [q, s, t = 0 - 1; n, r = 0 - 5; m, p = 0 - 2; X = CH, C(0), O, S, S(0), S(0), N-; provided that when m and p are both 1 then X is not CH; Y = NHR2, OH; T = C(0), C(S), S(0), CH2; R1 = H, alkyl, aryl, heterocyclyl; R2, R47 = H, alkyl, aryl-alkyl, CO-alkyl; R3 = alkyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, thioaryl, thioheterocyclyl] were prepared Examples include: data for over 600 compds., 4 solid oral dosage and 1 parenteral (general) formulations, a bioassay for Ca2+ flux, human eosinophil chemotaxis and H1 antagonism. E.g., 4-(3,4-dichlorophenoxy)piperidine was alkylated with 1-(tert-butoxycarbonyl)-4-piperidone (1,2-dichloroethane, NaBH(OAc)3, HOAc, 18 h, room temperature) to give an intermediate [1,4']bipiperidine. This intermediate was deprotected (DCM, TFA, 4 h, room temperature) and the resulting

II

bipiperidine condensed with 3-methanesulfonylbenzoic acid (THF, PYBROP, (i-Pr)2NEt, 18 h, room temperature) to give example compound II isolated as the acetate salt. I are used in the treatment of a chemokine (such as CCR3) or H1 mediated disease state.

IT367500-89-8P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; synthesis of substituted bipiperidines and use as H1 antagonists)

RN 367500-89-8 CA

1-Piperidinecarboxylic acid, 4-[(3,4-dichlorophenyl)thio]-, CN

1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS 10 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

COPYRIGHT 2007 ACS on STN L11 ANSWER 8 OF 66

ACCESSION NUMBER:

135:107343 CA

TITLE:

Preparation of 1-arylalkylpiperidines and piperazines

as 5-HT2A antagonists

INVENTOR(S):

Ackermann, Karl-August; Boettcher, Henning; Pruecher, Helmut; Van Amsterdam, Christoph; Seyfried, Christoph; Greiner, Hartmut; Bartoszyk, Gerd; Harting, Juergen

Merck Patent G.m.b.H., Germany

PATENT ASSIGNEE(S): SOURCE:

Ger. Offen., 10 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.		APPLICATION NO.	DATE
		DE 2000-10000739	20000111 <
		CA 2001-2396007	
WO 2001051469	A1 20010719	WO 2001-EP80	20010105 <
W: AE, AL, AM	AT, AU, AZ, BA,	BB, BG, BR, BY, CA, CH,	CN, CR, CU,
CZ, DE, DK	, DM, EE, ES, FI,	GB, GD, GE, GH, GM, HR,	HU, ID, IL,
IN, IS, JP	, KE, KG, KP, KR,	KZ, LC, LK, LR, LS, LT,	LU, LV, MA,
MD, MG, MK	, MN, MW, MX, NO,	NZ, PL, PT, RO, RU, SD,	SE, SG, SI,
	• • • • •	UA, UG, US, UZ, VN, YU,	
• •		SL, SZ, TZ, UG, ZW, AT,	· · · · · · · · · · · · · · · · · · ·
		IE, IT, LU, MC, NL, PT,	
		GW, ML, MR, NE, SN, TD,	
		BR 2001-7578	
EP 1246803	A1 20021009	EP 2001-905650	20010105
R: AT, BE, CH	, DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
IE, SI, LT	, LV, FI, RO, MK,	CY, AL, TR	
HU 200300052	A2 20030528	HU 2003-52	20010105
JP 2004500373	T 20040108	JP 2001-551851	20010105
NO 2002003293	A 20020708	NO 2002-3293	20020708
		IN 2002-KN1015	20020807
ZA 2002006361	A 20031110	ZA 2002-6361 .	20020808
US 2003130287	A1 20030710	US 2002-169399	20021105

10/500,517

PRIORITY APPLN. INFO.:

DE 2000-10000739 WO 2001-EP80 A 20000111 W 20010105

OTHER SOURCE(S):

MARPAT 135:107343

GI

$$R^{1}-N$$
 $X-Y-R^{2}$
I

AB Title compds. [I; R1, R2 = (substituted) phenylalkyl, naphthylalkyl, heterocyclylalkyl; X = CH, N; Y = SO2 if X = N; Y = S, SO, SO2 if B = CH] and salts thereof were prepared as 5-HT2A antagonists (no data). Thus, 1-[2-(4-fluorophenyl)ethyl]piperazine (preparation given) and 8-chlorosulfonylquinoline in CH2Cl2 were stirred with 4-DMAP for 24 h at room temperature to give 4-(8-quinolinesulfonyl)-1-[2-(4-fluorophenyl)ethyl]piperazine.

IT 349664-17-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of arylalkylpiperidines and piperazines as 5-HT2A antagonists)

RN 349664-17-1 CA

CN Piperidine, 1-[2-(4-fluorophenyl)ethyl]-4-[(4-fluorophenyl)thio]-, hydrochloride (9CI) (CA INDEX NAME)

• HCl

L11 ANSWER 9 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

135:61244 CA

TITLE:

Preparation of hydroxamic acid derivatives as matrix

metalloproteinase (MMP) inhibitors

INVENTOR(S):

Owen, David Alan; Baxter, Andrew Douglas; Watson,

Robert John; Hannah, Duncan Robert; Montana, John Gary

PATENT ASSIGNEE(S):

Darwin Discovery Ltd., UK PCT Int. Appl., 27 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001044189	A1	20010621	WO 2000-GB4865	20001218 <

AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 1237868 20020911 EP 2000-985613 **A1** 20001218 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR 20020924 US 2001-806259 US 6455531 R1 20010328 PRIORITY APPLN. INFO.: GB 1999-29979 19991217 WO 2000-GB4865 W 20001218 OTHER SOURCE(S): MARPAT 135:61244 The title compds. B2NCOCH2CR1R2CONHOH [I; R1 = alkyl, alkenyl, aryl, etc.; R2 = H, alkyl; CR1R2 = (un) substituted cycloalkyl, heterocyclyl; NB2 = (un) substituted heterocycloalkyl] having therapeutic utility, were prepared E.g., a multi-step synthesis of (2S)-I [R1 = Me2CHCH2; R2 = H; NB2 = 4-(4-chlorobenzoyl)piperidin-1-yl] was given. The compds. I are effective in treating inflammation at 0.01-50 mg/kg/day. 333954-87-3P TΥ RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn of hydroxamic acid derivs. as matrix metalloproteinase (MMP) inhibitors) 333954-87-3 CA RN1-Piperidinecarboxylic acid, 4-[(4-chlorophenyl)thio]-, 1,1-dimethylethyl CN

ester (9CI)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 66 CA COPYRIGHT 2007 ACS on STN

(CA INDEX NAME)

ACCESSION NUMBER:

134:334220 CA

TITLE:

Silver halide photographic material containing bleaching accelerator-releasing coupler and

manufacture of the coupler

INVENTOR(S):

Kataoka, Emiko; Ishige, Osamu; Ishii, Fumio; Oshiyama,

Tomohiro

PATENT ASSIGNEE(S):

Konica Co., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 43 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001117204	A	20010427	JP 1999-297162	19991019 <

PRIORITY APPLN. INFO.:

JP 1999-297162

19991019

OTHER SOURCE(S):

MARPAT 134:334220

GI

NR1 Α2 A1 R3

The photog. material contains a coupler Coup-(Time) nSZ (Z = X, X1, A1(I), AB A2(II); X = saturated heterocycle having no OH, CO2M, SO2M, NRaRb groups; M = H, alkali metal, ammonium, Ra, Rb = H, C1-4 aliphatic group; X1 = nonsubstituted saturated heterocycle; n = 0-2; R1 = H, alkyl; R2 = H, substituent without OH, CO2M, SO3M, and NR1Rb; R3 = C1-8 alkyl; Q = C2-4 aliphatic group to form ring with S and N; Coup = coupler residue; Time = timing group). The compds. Coup-SR4 and Coup-SA1 are manufactured by reaction of Coup-SH with silylating agents, followed by reaction with unsatd. heterocyclic compds. The photog. material shows excellent desilvering characteristics at rapid development process and good storage stability. IT 336110-02-2

RL: DEV (Device component use); USES (Uses)

(manufacture of bleaching accelerator-releasing coupler for silver halide photog. material)

RN336110-02-2 CA

2-Naphthalenecarboxamide, N-[4-[2,4-bis(1,1-dimethylpropyl)phenoxy]butyl]-CN 1-hydroxy-4-[(1-methyl-4-piperidinyl)thio]- (9CI) (CA INDEX NAME)

Me
N
S
$$C-NH-(CH_2)_4-O$$
Me
OH
 $Me-C-Et$
Me

L11 ANSWER 11 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

134:295840 CA

TITLE:

Preparation of indolylpropanoyltetrahydroquinoline derivatives which inhibit binding of somatostatin

receptors

INVENTOR(S):

Kato, Kaneyoshi; Terauchi, Jun; Suzuki, Nobuhiro;

Takekawa, Shiro

PATENT ASSIGNEE(S):

Tadeka Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 220 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

GΙ

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. APPLICATION NO. DATE KIND DATE ---------------_ _ _ _ 20010412 WO 2000-JP6937 20001005 <--WO 2001025228 **A1** W: AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CN, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG CA 2000-2386517 A1 20010412 20001005 <--CA 2386517 AU 2000-75568 Α 20010510 20001005 <--AU 2000075568 JP 2000-311723 20020327 20001005 JP 2002088079 Α 20020731 EP 2000-964676 20001005 EP 1227090 A1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL JP 1999-286939 A 19991007 PRIORITY APPLN. INFO.: JP 2000-215837 Α 20000711 WO 2000-JP6937 W 20001005 OTHER SOURCE(S): MARPAT 134:295840

The title compds. I [X and X' are the same or different and each represents hydrogen, fluorine, etc., provided that at least one of X and X' represents fluorine, chlorine, etc.; R1 and R2 represents each hydrogen or optionally substituted C1-6 alkyl, or R1 and R2 form together with the nitrogen atom adjacent thereto an optionally substituted nitrogen-containing heterocycle; Y and Q are the same or different and each represents a bond or a spacer having 1 to 6 atoms in the main chain; the dotted line represents a single or double bond; T1 and T2 represent each C(R9) (wherein R9 represents hydrogen, hydroxy, etc.), N, etc.; and Ar represents an optionally substituted aromatic group, hydrogen, etc.; a provision is given] are prepared. In an in vitro test for inhibition of

I

binding to the somatostatin receptor type 2, several compds. of this invention showed IC50 of 0.6 to 2 nM. Formulations are given.

IT 333954-13-5P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indolylpropanoyltetrahydroquinoline derivs. which inhibit binding of somatostatin receptors)

RN 333954-13-5 CA

CN 1-Piperidinecarboxamide, N-[(1R)-2-[(3R)-6-chloro-3-

[(dimethylamino)methyl]-3,4-dihydro-1(2H)-quinolinyl]-1-(1H-indol-3ylmethyl)-2-oxoethyl]-4-[(4-fluorophenyl)thio]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

14

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

REFERENCE COUNT:

134:295739 CA

TITLE: Preparation of N-aryl-N-(heterocyclylalkyl)piperidinec

arboxamides as CCR5 antagonists

Imamura, Shinichi; Hashiguchi, Shohei; Hattori, Taeko; INVENTOR (S):

Nishimura, Osamu; Kanzaki, Naoyuki; Baba, Masanori;

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

Sugihara, Yoshihiro

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

PCT Int. Appl., 392 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT	NO.			KIN	D :	DATE			APPL	ICAT	ION I	NO.		Di	ATE	
WO 2001	.0252	00		A1	_	2001	0412	,	WO 2	000-	JP67	55		2	0000	929 <
W :	ΑE,	AG,	AL,	AM,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CN,	CR,	CU,
	CZ,	DM,	DZ,	EE,	GD,	GE,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KG,	KR,	KZ,
	LC,	LK,	LR,	LT,	LV,	MA,	MD,	MG,	MK,	MN,	MX,	MZ,	NO,	NZ,	PL,	RO,
	RU,	SG,	SI,	SK,	TJ,	TM,	TR,	TT,	UA,	US,	UZ,	VN,	YŪ,	ZA		
RW:	GH,					-	-	-	-						CH,	CY,
						GB,		-								
						GN,									·	•

CA 2385938		A1	20010412	CA 2000-2385938		20000929 <
AU 20007448	37	A	20010510	AU 2000-74487		20000929 <
JP 20013026	33	A	20011031	JP 2000-302841		20000929 <
JP 3814136		B2	20060823			
BR 20000144	28	Α	20020611	BR 2000-14428		20000929
EP 1220842		A1	20020710	EP 2000-962967		20000929
R: AT,	BE, CH,	DE, DE	K, ES, FR,	GB, GR, IT, LI, LU,	NL, SE	E, MC, PT,
IE,	SI, LT,	LV, FI	I, RO, MK,	CY, AL		
JP 20030488	80	Α	20030221	JP 2002-180545		20000929
HU 20030013	8	A2	20030528	HU 2003-138		20000929
HU 20030013	8	A3	20030630			
NO 20020014	50	Α	20020603	NO 2002-1450		20020322
US 6562978		B1	20030513	US 2002-89374		20020329
ZA 20020025	93	Α	20030403	ZA 2002-2593		20020403
US 20031144	43	A1	20030619	US 2002-273111		20021018
PRIORITY APPLN.	INFO.:			JP 1999-282088	Α	19991001
				JP 2000-46749	Α	20000218
				JP 2000-302841	A3	20000929
				WO 2000-JP6755	W	20000929
				US 2002-89374	A3	20020329
OTHER COURCE(C)		MADDAT	r 134.2957			

OTHER SOURCE(S):

MARPAT 134:295739

Title compds. (I) [wherein R1 = H, (un) substituted hydrocarbon or nonarom. AB heterocycle; R2 = (un)substituted hydrocarbon or nonarom. heterocycle; or R1 and R2 together with A form an (un) substituted heterocycle; A = N or N+(R5) •Y-; R5 = hydrocarbon; Y- = counteranion; R3 = (un) substituted (hetero)cycle; n = 0 or 1; R4 = H or (un)substituted hydrocarbon, heterocycle, alkoxy, aryloxy, or amino group; E = (un)substituted divalent aliphatic hydrocarbon; G1 = a bond, CO, or SO2; G2 = CO, SO2, NHCO, CONH, or OCO; J = CH or N; Q and R = independently a bond or (un)substituted divalent aliphatic hydrocarbon; provided that J = CH when G2 = OCO, that 1 of Q and R is not a bond when the other is a bond, and that each of Q and R is not substituted by oxo group(s) when G1 is a bond; or a salt thereof] were prepared as potent chemokine receptor CCR5 antagonists. I are useful for the treatment or prevention of the HIV disease in humans (e.g. AIDS). For example, II-HCl was synthesized in 34% yield in a 2-step process involving addition of TFA to a solution of 1-tert-butoxycarbonyl-4-(2benzothiazolylthio)piperidine in CH2Cl2, followed by addition of AcCN, 1-acetyl-N-(3-chlorophenyl)-N-(3-chloropropyl)-4-piperidinecarboxamide, K2CO3, and KI to the residue and workup. II⊕HCl showed 96% inhibition of HIV-1 infection in transformant MAGI-CCR5 cells. In addition, 42 example

compds. were tested and gave inhibition rates of 82% to 100% at 1.0 μM in a CCR5 antagonistic activity assay.

IT 101798-66-7P, 4-(Phenylthio)piperidine hydrochloride

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of N-aryl-N-(heterocyclylalkyl)piperidinecarboxam ide CCR5 antagonists by amidation of N-(arylheterocyclyl)alkylamines or addition of heterocycles to N-aryl-N-(haloalkyl)piperidinecarboxamides)

RN 101798-66-7 CA

CN Piperidine, 4-(phenylthio)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

134:157196 CA

TITLE:

Synthesis and analgesic activity of some quinazoline

analogs of anpirtoline

AUTHOR (S):

Radl, Stanislav; Hezky, Petr; Proska, Jan; Krejci,

Ivan

CORPORATE SOURCE:

Research Institute of Pharmacy and Biochemistry,

Prague, 13060, Czech Rep.

SOURCE:

Archiv der Pharmazie (Weinheim, Germany) (2000

), 333(11), 381-386

CODEN: ARPMAS; ISSN: 0365-6233

PUBLISHER:

Wiley-VCH Verlag GmbH

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 134:157196

AB New condensed derivs. of anpirtoline, in which the pyridine ring is replaced with quinoline, quinazoline, 7-chloroquinoline, and 7-chloroquinazoline nuclei, have been synthesized. Their receptor binding profiles (5-HT1A, 5-HT1B) and analgesic activity (hot plate, acetic acid induced writhing) have been studied. The analgesic activity of some of the compds. are comparable to that of clin. used drugs flupirtine and tramadol under the same conditions.

IT 101798-69-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (synthesis and analgesic activity of quinazoline analogs of anpirtoline)

RN 101798-69-0 CA

CN Piperidine, 4-[(3-chlorophenyl)thio]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS 14 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L11 ANSWER 14 OF 66 134:17399 CA

ACCESSION NUMBER:

TITLE:

Aromatic sulfone hydroxamic acid metalloprotease

inhibitors

INVENTOR(S):

Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.; Boehm, Terri L.; Carroll, Jeffrey N.; Decrescenzo, Gary A.; Fobian, Yvette M.; Freskos, John N.; Getman, Daniel P.; McDonald, Joseph J.; Hockerman, Susan L.; Howard, Susan C.; Kolodziej, Stephen A.; Li, Madeleine Hui; Mischke, Deborah A.; Rico, Joseph G.; Stehle, Nathan W.; Tollefson, Michael B.; Vernier, William F.;

Villamil, Clara I.

PATENT ASSIGNEE(S):

SOURCE:

G.D. Searle and Co., USA

PCT Int. Appl., 616 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent

English

FAMILY ACC. NUM. COUNT:

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
W: AE, CU, ID, LV, SG, RW: GH, DK,	AG, AL, CZ, DE, IL, IN, MA, MD, SI, SK, GM, KE, ES, FI,	AM, AT DK, DM IS, JP MG, MK SL, TJ LS, MW FR, GB	, AU, AZ, , DZ, EE, , KE, KG, , MN, MW, , TM, TR, , SD, SL, , GR, IE,	WO 2000-US6719 BA, BB, BG, BR, BY, ES, FI, GB, GD, GE, KP, KR, KZ, LC, LK, MX, NO, NZ, PL, PT, TT, TZ, UA, UG, US, SZ, TZ, UG, ZW, AT, IT, LU, MC, NL, PT,	CA, CH, CN, CR, GH, GM, HR, HU, LR, LS, LT, LU, RO, RU, SD, SE, UZ, VN, YU, ZA, ZW BE, CH, CY, DE,
US 6750228 CA 2372934 EP 1183239 R: AT, IE, BR 200001056 JP 200352019 AU 766792	BE, CH, SI, LT, 52 96	B1 A1 A1 DE, DK LV, FI A T B2 A	20040615 20001123 20020306 , ES, FR, , RO 20030610 20030702 20031023 20040430 20021202	AU 2000-47970 NZ 2000-515217 ZA 2001-9006	20000515 < 20000515 NL, SE, MC, PT, 20000515 20000515 20000515 20011031 20011113 A 19990514 A 20000512 P 19971114 P 19980804

WO 2000-US6719 W 20000515

OTHER SOURCE(S):

MARPAT 134:17399

GI

AB A treatment process is disclosed that comprises administering an effective amount of an aromatic sulfone hydroxamic acid I [W = H, cation, certain acyl or thioacyl groups; m, n, p = 0-2; (m+n+p) = 1 to 4; one of X, Y, and Z = CO, NH or derivs., O, S, SO, SO2, etc., and the other two = (un)substituted CH2; or XZ or ZY = (un)substituted NHCO, NHSO2, NHSO2, SS, OCO, etc., and the other one = (un) substituted CH2; or n = 0 and XZY = atoms to complete various N/O/S heterocycles; Q = 5- to 7-membered heterocycle with 1-2 N atoms, one bound to Ph, and with -AREY bound in para-type positions; A = bond, O, S, (un) substituted NH, COO, OCO, CH:CH, C.tplbond.C, N:N, NHNH, NHCOO, (un) substituted CONH, NHCO, etc.; R = alkylene, arylene, heteroarylene, etc., with provisos; E = bond, CONH, NHCO, CO, SO2, NHSO2, SO2NH, S, etc.; Y = absent, H, alkyl, alkoxy, aryl, aryloxy, heteroaryl, etc.] to a host having a condition associated with pathol. matrix metalloprotease (MMP) activity. I exhibit excellent inhibitory activity of one or more MMP enzymes, such as MMP-2, MMP-9 and MMP-13, while exhibiting substantially less inhibition of (at least) MMP-1. Also disclosed are metalloprotease inhibitor compds. having such selective activities, processes for manufacture of such compds., and pharmaceutical compns. using such inhibitors. The compds. are potentially useful against a wide variety of conditions, notably as antiinflammatory, antiangiogenesis, and antitumor agents. Over 900 example compds. are listed, most with supporting phys. data, and many with synthetic details. For instance, Et N-(tert-butoxycarbonyl)-4-(4-fluorophenylsulfonyl)-4piperidinecarboxylate (preparation given) was subjected to a sequence of: (1) etherification with 4-(CF3S)C6H4OH (100%); (2) alkaline hydrolysis of the ester (100%); (3) amidation with THP-ONH2 (45%); and (4) acid deprotection of the THP ether (40%), to give title compound II.HCl. The latter salt selectively inhibited MMP-13 with IC50 0.2 nM, and MMP-2 with IC50 0.1 nM, but with IC50 >10,000 nM against MMP-1.

IT 308825-68-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of aromatic sulfone hydroxamic acids as

metalloprotease inhibitors)

RN308825-68-5 CA

4-Piperidinecarboxamide, 1-cyclopropyl-N-hydroxy-4-[[4-[4-(phenylthio)-1-CN piperidinyl]phenyl]sulfonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L11 ANSWER 15 OF 66

ACCESSION NUMBER:

134:4752 CA TITLE:

Preparation of hydroxamic acid derivatives as matrix

metalloprotease inhibitors

Bedell, Louis J.; McDonald, Joseph J.; Barta, Thomas INVENTOR(S):

E.; Becker, Daniel P.; Rao, Shashidhar N.; Freskos, John N.; Mischke, Brent V.; Getman, Daniel P.;

Decrescenzo, Gary A.; Villamil, Clara I.

PATENT ASSIGNEE(S):

SOURCE:

G.D. Searle and Co., USA

PCT Int. Appl., 380 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 11

PAT	ENT NO.			DATE	APPLICATION NO.	DATE
WO	20000698				WO 2000-US6713	20000512 <
		-			BA, BB, BG, BR, BY,	
				•	ES, FI, GB, GD, GE,	
	•		-		KP, KR, KZ, LC, LK,	
	•	•	-		MX, NO, NZ, PL, PT,	
					TT, TZ, UA, UG, US,	
					SZ, TZ, UG, ZW, AT,	
					IT, LU, MC, NL, PT,	SE, BF, BJ, CF,
					MR, NE, SN, TD, TG	
CA	2373500		A1	20001123	CA 2000-2373500	20000512 <
EP	1177173		A1	20020206	EP 2000-931910	20000512
	R: AT,	BE, CH	DE, DI	K, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
	IE,	SI, LT	LV, F	I, RO		
				20020514		
					JP 2000-618236	20000512
NZ	515197		A	20040326	NZ 2000-515197	20000512
AU	781339		B2	20050519	AU 2000-49718	20000512
ZA	20010090	07	A	20030131	ZA 2001-9007	20011031
PRIORITY	APPLN.	INFO.:			US 1999-310813	A 19990512
					WO 2000-US6713	W 20000512
OTHER SO	URCE(S):		MARPA?	134:4752		

GI

Title compds. [I; W = 5, 6 membered aromatic, heteroarom. ring; R = 5, 6 membered cyclohydrocarbyl, heterocyclo, aryl, heteroaryl; R5. R6 independently = hydrido, alkyl, cycloalkyl, acylalkyl, halo, nitro, hydroxyl, cyano, alkoxy, haloalkyl, haloalkyloxy, hydroxyalkyl, etc; R20 = alkoxy, aryloxy, alkoxyamino, benzyloxyamino, etc] and pharmaceutically acceptable salts with inter alia inhibits matrix metalloprotease activity are disclosed and a treatment that comprises administering a contemplated sulfonyl aromatic or heteroarom. hydroxamic acid in an MMP enzyme-inhibiting effective amount to a host having a condition associated with pathol. matrix metalloprotease activity are claimed. Thus, the title compound II was prepared and MMP-2, MMP-3, MMP-8, MMP-13, and MT1-MMP inhibition activities were assayed.

II

IT 308385-58-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of hydroxamic acid derivs. as matrix metalloprotease inhibitors)

RN 308385-58-2 CA

CN Benzamide, N-hydroxy-2,3-dimethoxy-6-[[4-(phenylthio)-1-piperidinyl]sulfonyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 66 CA COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 133:309908 CA

TITLE:

Preparation of piperazinyladamantylmethylbenzamides and related compounds as P2X7 receptor antagonists.

Alcaraz, Lilian; Furber, Mark; Mortimore, Michael

PATENT ASSIGNEE(S):

AstraZeneca AB, Swed. PCT Int. Appl., 166 pp.

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR (S):

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFO	ORMATION:
-------------	-----------

PATENT NO.	KIND DATE	APPLICATION NO.	DATE						
WO 2000061569	A1 200010	19 WO 2000-SE663	20000406 <						
W: AE, AG,	AL, AM, AT, AU, A	Z, BA, BB, BG, BR, BY,	CA, CH, CN, CR,						
		E, ES, FI, GB, GD, GE,							
· ID, IL,	IN, IS, JP, KE, I	G, KP, KR, KZ, LC, LK,	LR, LS, LT, LU,						
LV, MA,	MD, MG, MK, MN, N	W, MX, NO, NZ, PL, PT,	RO, RU, SD, SE,						
SG, SI,	SK, SL, TJ, TM, T	R, TT, TZ, UA, UG, US,	UZ, VN, YU, ZA, ZW						
RW: GH, GM,	KE, LS, MW, SD, S	L, SZ, TZ, UG, ZW, AT,	BE, CH, CY, DE,						
DK, ES,	FI, FR, GB, GR, I	E, IT, LU, MC, NL, PT,	SE, BF, BJ, CF,						
CG, CI,	CM, GA, GN, GW, N	L, MR, NE, SN, TD, TG							
CA 2368829	A1 200010	19 CA 2000-2368829	20000406 <						
BR 2000009651	A 200201	08 BR 2000-9651	20000406						
EP 1171432	A1 200201	19 CA 2000-2368829 08 BR 2000-9651 16 EP 2000-919245	20000406						
R: AT, BE,	CH, DE, DK, ES, I	R, GB, GR, IT, LI, LU,	NL, SE, MC, PT,						
IE, SI,	LT, LV, FI, RO								
TR 200102911	T2 200201	21 TR 2001-2911 28 HU 2002-2214 03 JP 2000-610843	20000406						
HU 200202214	A2 200210	28 HU 2002-2214	20000406						
JP 2002541249	T 200212	03 JP 2000-610843	20000406						
EE 200100525	A 200212	16 EE 2001-525	20000406						
EE 4565	B1 200512	1 20051215							
NZ 514477 AU 774526	A 200304	29 NZ 2000-514477	20000406						
AU 774526	B2 200407	01 AU 2000-39947	20000406						
RU 2254333	C2 200506	20 RU 2001-130140	20000406						
US 6492355	B1 200212	10 US 2000-555489	20000601						
IN 2001MN01201	A 200503	18 IN 2001-MN1201 10 NO 2001-4894 08 08 ZA 2001-8265	20011001						
NO 2001004894	A 200112	10 NO 2001-4894	20011008 <						
NO 321405	B1 200609	08							
ZA 2001008265	A 200303	08 ZA 2001-8265	20011008						
PRIORITY APPLN. INFO.		SE 1999-1270	A 19990409						
PRIORITY APPLN. INFO.		GB 2000-2330 WO 2000-SE663	A 20000201						
		WO 2000-SE663	W 20000406						
OTHER SOURCE(S):	MARPAT 133:30	9908							

(CH₂) mAAr
$$R^{1}$$

$$R^{1}$$

$$R^{1}$$

$$R^{2}$$

$$Q^{1} = R^{2}$$

$$R^{2}$$

$$Q^{2} = R^{2}$$

Title compds. I [m = 1-3; R1 = H, halo; A = CONH; Ar = Q1, Q2; X = O, CO,AB (CH2)1-6, S, SO, SO2, etc.; 1 of R2, R3 = halo, cyano, NO2, amino, OH,

GI

(substituted) alkyl, cycloalkyl, alkoxy, etc., the other = H, halo; R4 = 3-9 membered (unsatd.) (substituted) heterocyclyl containing 1-2 N atoms, substituted 3-8 membered carbocyclyl], were prepared Thus, 3-chloro-2-nitro-N-[tricyclo[3.3.1.13,7]dec-1-ylmethyl]benzamide (preparation given) and tert-Bu piperazine-1-carboxylate were heated at 120° in Me2SO for 24 h to give the coupling product, which was stirred with HCl in THF/dioxane to give 2-nitro-3-piperazin-1-yl-N-[tricyclo[3.3.1.13,7]dec-1ylmethyl]benzamide. I antagonized P2X7 receptors with pIC50 >4.50.

IT 301672-29-7P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperazinyladamantylmethylbenzamides and related compds. as P2X7 receptor antagonists)

301672-29-7 CA RN

Benzamide, 2-chloro-5-(4-piperidinylthio)-N-(tricyclo[3.3.1.13,7]dec-1-CN ylmethyl) -, monohydrochloride (9CI) (CA INDEX NAME)

HCl

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 17 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

133:276351 CA

TITLE:

Imide derivatives as proteoglycan formation

accelerators

INVENTOR(S):

Hashimoto, Takeji

PATENT ASSIGNEE(S):

Sumitomo Pharmaceuticals Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000281576	· A	20001010	JP 1999-87202	19990329 <
PRIORITY APPLN. INFO.:			JP 1999-87202	19990329
OTHER SOURCE(S)	МАРРАТ	133-276351		

Imide derivs. (Markush's structures given) and their salts are claimed as AB proteoglycan formation accelerators for treatment of cartilage disorders and arthritis deformans.

IT 139505-64-9

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(imide derivs. as proteoglycan formation accelerators)

RN 139505-64-9 CA

1H-Isoindole-1,3(2H)-dione, 2-[[(1R,2R)-2-[[4-[(4-fluorophenyl)thio]-1-CN piperidinyl]methyl]cyclohexyl]methyl]hexahydro-, monohydrochloride, (3aR,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

COPYRIGHT 2007 ACS on STN L11 ANSWER 18 OF 66 CA

ACCESSION NUMBER:

133:193079 CA

TITLE:

Preparation of arylsulfonylheterocyclylhydroxamic

acids and related compounds as matrix metalloprotease

inhibitors

INVENTOR (S):

Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.; Boehm, Terri L.; Carroll, Jeffery N.; De Crescenzo, Gary A.; Fobian, Yvette M.; Freskos, John N.; Getman, Daniel P.; McDonald, Joseph J.; Hanson, Gunnar J.; Hockerman, Susan L.; Howard, Susan C.; Kolodziej, Steve A.; Li, Hui; Mischke, Deborah A.; Rico, Joseph G.; Stehle, Nathan W.; Tollefson, Michael B.; Vernier, William F.; Villamil, Clara I.; Rao, Shashidahar N.

PATENT ASSIGNEE(S):

SOURCE:

G.D. Searle and Co., USA PCT Int. Appl., 851 pp.

CODEN: PIXXD2 .

DOCUMENT TYPE:

LANGUAGE:

Patent

English

FAMILY ACC. NUM. COUNT:

PATENT	NO.	í		KIN	D :	DATE			APPL	ICAT	ION I	NO.		D	ATE	
WO 200	0503	 96		A1	-	2000	0831	1	WO 2	 000-1	US25	18		2	0000:	222 <
W:	ΑE,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
	CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
						MX,										
						TT,										
RW	GH,															DE,
						GR,										

GI

```
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                              US 1999-256948
                                 20011108
                                                                       19990224 <--
     US 2001039287
                           Α1
                                              CA 2000-2371876
                                                                       20000222 <--
                                 20000831
     CA 2371876
                           A1
                                              AU 2000-34785
                                                                       20000222 <--
                                 20000914
     AU 200034785
                           Α
                                              HU 2002-239
                                 20020629
                                                                       20000222
     HU 200200239
                           A2
                                              EP 2000-913317
                                                                       20000222
     EP 1230219
                           A1
                                 20020814
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
                                              BR 2000-8491
                                                                       20000222
     BR 2000008491
                           Α
                                 20020917
     JP 2002537378
                           T
                                 20021105
                                              JP 2000-600979
                                                                       20000222
                                                                       20000222
     NZ 513648
                           Α
                                 20040227
                                              NZ 2000-513648
                                              NO 2001-3963
                                                                       20010815 <--
     NO 2001003963
                           Α
                                 20011023
                                              ZA 2001-6780
                                                                       20010816
     ZA 2001006780
                           Α
                                 20020816
                                                                       20010821
     IN 2001CN01174
                          · A
                                 20050304
                                              IN 2001-CN1174
     US 2002177588
                           A1
                                 20021128
                                              US 2001-954451
                                                                       20010917
                           В2
                                 20040615
     US 6750233
PRIORITY APPLN. INFO.:
                                              US 1999-256948
                                                                   Α
                                                                      19990224
                                              US 1997-66007P ·
                                                                   Р
                                                                       19971114
                                                                   P
                                              US 1998-95347P
                                                                       19980804
                                                                   P
                                                                       19980806
                                              US 1998-95501P
                                                                   P
                                                                       19980918
                                              US 1998-101080P
                                              WO 2000-US2518
                                                                   W
                                                                       20000222
OTHER SOURCE(S):
                          MARPAT 133:193079
```

Ι

AΒ A process for treating conditions associated with pathol. matrix metalloproteinase (MMP) activity comprises administration of compds. having inhibitory activity against >1 of MMP-2, MMP-9, and MMP-13, while exhibiting substantially less inhibition of MMP-1. The compds. are of the form HONHCOCR1R2SO2R3 [R1, R2 = H; R1R2 = atoms to form a 5-8 membered ring containing 1-3 heteroatoms; R3 = (substituted) aryl, heteroaryl]. 4-PhOC6H4SH was heated in Me2SO to give the disulfide dimer, which in THF was added to a mixture of Et N-tert-butoxycarbonylisonipecotate (preparation given) and LDA in THF at -60° to room temperature to give 40% sulfide, which was oxidized with m-ClC6H4CO(OOH) to give 59% sulfone. The Et ester was saponified with NaOH in EtOH/H2O to give 100% acid, which in DMF was treated with hydroxybenzotriazole, EDC, 4-methylmorpholine, and aqueous NH2OH to give title compound I. I inhibited MMP-2 with IC50 = 0.2 nM. Pharmacol., pharmacokinetic, and toxicol. data are given for selected compds.

IT 188527-03-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of arylsulfonylheterocyclylhydroxamic acids and related compds. as matrix metalloprotease inhibitors)

RN 188527-03-9 CA

CN 1-Piperidinecarboxylic acid, 4-[(4-bromophenyl)thio]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

133:164006 CA

TITLE:

Preparation of sulfamato hydroxamic acid

metalloprotease inhibitors

INVENTOR(S):

De Crescenzo, Gary A.; Rico, Joseph G.; Boehm, Terri L.; Carroll, Jeffery N.; Kassab, Darren J.; Mischke,

Deborah A.

PATENT ASSIGNEE(S):

SOURCE:

G.D. Searle and Co., USA

PCT Int. Appl., 628 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PA'	TENT	NO.			KIN		DATE			APPLICATION NO.					DATE			
WO					,A1					WO 2000-US3061								
	W:	ΑE,	ΑL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,	
		CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	
		IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	
		MD,	MG,	MK,	MN,	MW,	MX,	ΝO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	
		SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VN,	YU,	ZA,	ZW		
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	
		CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG					
CA	2362	230			. A1		2000	0810		MR, NE, SN, TD, TG CA 2000-2362230					20000207 <			
											P 2000-905996							
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,													
BR	2000	0084	40		Α		2002	0326		BR 2000-8440						20000207		
HU	2002	0011	119				2002	0629		HU 2002-119						0000	207	
US	6448	448250			81		2002	0910		US 2	000-	4992	76		20	0000	207	
JP	2002	5363	73		T		2002									0000	207	
EE	2001	200100410			Α		2002	1216		EE 2001-410					20	0000	207	
	7757						2004	0812		AU 2000-27574								
US	6372	758			B1		20020416			US 2001-884548					20010619			
NO	2001	0038			Α						NO 2001-3850							
	1057				Α		20020228			BG 2001-105788								
	2001						2003			ZA _, 2	001-	6492			20	010	807	
	2001	CN01	119		A		2005			IN 2001-CN1119					20010808			
	6492				B1	20021210			US 2002-84713					20020226				
	6800				В1			0041005			US 2002-262622				20020930			
	1049				A1				.2 HK 2003-100924						20030207			
	2005								•	US 2	004-	8874	50		20	040	708	
US	7067	670			B2	•	2006	0627										

PRIORITY APPLN. INFO.:

US 1999-119181P P 19990208 US 2000-499276 A1 20000207 WO 2000-US3061 W 20000207 US 2002-84713 A3 20020226 US 2002-262622 A3 20020930

OTHER SOURCE(S):

MARPAT 133:164006

GΙ

HO
$$SO_2 - N$$
 $O - CH_2 - Ph$

The title compds. R2OC(O)CR1R2SO2NR3aR3b (I) [wherein R1 and R2 taken AB together with the C to which they are attached = (un)substituted heterocyclyl or cycloalkyl; or R1 and R2 = independently H, (un) substituted (cyclo) alkyl, alkyloxylalkyl, alkylthioalkyl, alkenyl, alkynyl, aryl(alkyl), heterocyclyl(alkyl), etc.; R3a and R3b = independently H or (un) substituted alkyl, alkenyl, alkynyl, (hetero) aryl, heterocyclyl, cycloalkyl, or alkoxyalkyl; R20 = OH, alkoxyl, aryloxy, NH-OR22, or NH-OR14; R22 = selectively removable protecting group, such as 2-THP, benzyl, trisubstituted silyl, o-NO2C6H4, etc.; R14 = H, a cation, or acyl] were prepared as selective matrix metalloproteinase (MMP) inhibitors for the treatment of various conditions, such as pathol. breakdown of connective tissue, osteoarthritis, inflammation, tumor growth, and angiogenesis. Examples include the syntheses of over 50 piperidinylsulfonyl and piperazinylsulfonyl hydroxamic acids and their intermediates. In vitro MMP assay data for I show selective inhibition of MMP-2 and MMP-13 compared to MMP-1. Some inhibition assay data for MMP-3, MMP-7, MMP-8, MMP-9, and MMP-14 are also given. Thus, II was prepared in a multi-step sequence involving addition of MeOC(0)Cl to 1-(methylsulfonyl)-4-(benzyloxy)piperidine (4-step preparation given) to form the methylene sulfonamide, cycloaddn. of dibromodiethyl ether to give the THF-substituted sulfonamide, deesterification, addition of O-(tetrahydro-2H-pyran-2-yl)hydroxylamine to form the THP hydroxamate, and deprotection to yield the desired hydroxamic acid. II inhibited MMP-1, MMP-2, and MMP-13 with IC50 values of < 10,000 nM, 7.0 nM and 20.0 nM, resp.

IT 287952-15-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of sulfamato hydroxamic acid metalloprotease inhibitors by cycloaddn. of dihalodialkyl ethers and amines to methylene sulfonamides followed by addition of hydroxylamines)

RN 287952-15-2 CA

CN 1-Piperidinecarboxylic acid, 4-[[4-(trifluoromethyl)phenyl]thio]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

SOURCE:

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 133:144711 CA

TITLE: The effects of a novel cyclohexane dicarboximide

derivative, ST-6, on hypoxia/reoxygenation injury in

perfused rat heart

AUTHOR(S): Takeo, Satoshi; Tanonaka, Kouichi; Kajiwara, Hiroshi;

Miyake, Keiko; Antoku, Fujio; Mori, Hideki

CORPORATE SOURCE: Department of Pharmacology, Tokyo University of

Pharmacy and Life Science, Hachioji, 192-0392, Japan

Biological & Pharmaceutical Bulletin (2000),

23(6), 712-716

CODEN: BPBLEO; ISSN: 0918-6158

PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal LANGUAGE: English

The present study was undertaken to test if some cyclohexane dicarboximide derivs. may have a cardio-protective effect against hypoxia/reoxygenation injury. Isolated rat hearts were subjected to 20-min of hypoxia followed by 45-min reoxygenation, and their recovery of post-hypoxic cardiac contractile function was examined Treatment with agents was carried out from 3 min after the onset of hypoxia to the end of hypoxia (17 min during hypoxia). Among the 17 compds., 2-[4-[4-(4-chlorophenyl)-4-hydroxy-1piperidinyl]butyl]hexahydro-1H-isoindol-1,3(2H)-dione (ST-6) showed a significant enhancement of post-hypoxic contractile force. This was associated with attenuation of the releases of creatine kinase and purine nucleosides and bases from the perfused heart. Hypoxia-induced increase in myocardial sodium and decrease in potassium ion content was suppressed by ST-6 treatment. The results suggest that ST-6 is capable of protecting the heart against hypoxia/reoxygenation injury possibly through a mechanism by which sodium overload during hypoxia is suppressed. IT 287117-43-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effects of cyclohexane dicarboximide derivative ST-6 on hypoxia/reoxygenation injury in perfused rat heart)

RN 287117-43-5 CA

CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[4-[(4-fluorophenyl)thio]-1-piperidinyl]butyl]hexahydro- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

ACCESSION NUMBER

TITLE:

133:120235 CA

Preparation of phenylsulphonyl derivatives as 5-HT

receptor ligands

INVENTOR(S): Blu

Blurton, Peter; Burkamp, Frank; Cheng, Susan

Koon-Fung; Fletcher, Stephen Robert; MacLeod, Angus

Murray; Van Niel, Monique Bodil Merck Sharp and Dohme Limited, UK

PATENT ASSIGNEE(S):

PCT Int. Appl., 47 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND DATE	APPLICATION NO.				
		WO 2000-GB153 BB, BG, BR, BY, CA,	20000111 <			
		GB, GD, GE, GH, GM,				
	• • • • • • • • • • • • • • • • • • • •	KZ, LC, LK, LR, LS,				
		NZ, PL, PT, RO, RU,				
, , ,		UA, UG, US, UZ, VN,				
	KZ, MD, RU, TJ,		10, 211, 211, 121,			
		SZ, TZ, UG, ZW, AT,	BE, CH, CY, DE.			
	•	IT, LU, MC, NL, PT,				
		MR, NE, SN, TD, TG	52, 21, 20, 61,			
		CA 2000-2359983	20000111 <			
		EP 2000-900723				
EP 1147084						
		GB, GR, IT, LI, LU,	NL. SE. MC. PT.			
	LV, FI, RO	,,,,				
		AU 2000-30647	20000111			
		AT 2000-900723				
ES 2219296	T3 20041201	ES 2000-900723	20000111			
· US 6559166	B1 20030506	US 2001-889702	20010927			
US 2003203889	A1 20031030	US 2003-404188	20030401			
US 6777430	B2 20040817					
PRIORITY APPLN. INFO.:		GB 1999-1147	A 19990119			
		WO 2000-GB153	W 20000111			
		US 2001-889702	A3 20010927			
OTHER SOURCE(S):	MARPAT 133:1202	35				

The title compds. [I; Z = H, halo, CN, etc.; E = a bond, alkylene, AB optionally incorporating an oxygen atom to form an ether linkage; M = the residue of an azetidine, pyrrolidine or piperidine; R1 = arylalkyl; R2 = H, halo] which are selective antagonists of the human 5-HT2A receptor and are therefore useful as pharmaceutical agents, especially in the treatment and/or prevention of adverse conditions of the central nervous system, including schizophrenia and depression, were prepared E.g., a multi-step synthesis of II which showed Ki of ≤ 100 nM for displacement of [3H]-ketanserin from the human 5-HT2A receptor, when expressed in Chinese hamster ovary (CHO) clonal cell lines, was given.

II

IT 188527-03-9P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of phenylsulfonyl derivs. as 5-HT receptor ligands)

RN 188527-03-9 CA

CN 1-Piperidinecarboxylic acid, 4-[(4-bromophenyl)thio]-, 1,1-dimethylethyl (CA INDEX NAME) ester (9CI)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS 5 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 22 OF 66 COPYRIGHT 2007 ACS on STN 132:264953 CA

ACCESSION NUMBER:

INVENTOR (S):

TITLE: Substituted polycyclic aryl and heteroaryl

tertiary-heteroalkylamines useful for inhibiting cholesteryl ester transfer protein activity Sikorski, James A.; Durley, Richard C.; Mischke, Deborah A.; Reinhard, Emily J.; Fobian, Yvette M.; Tollefson, Michael B.; Wang, Lijuan; Grapperhaus,

Margaret L.; Hickory, Brian S.; Massa, Mark A.; Norton, Monica B.; Vernier, William F.; Parnas, Barry L.; Promo, Michele A.; Hamme, Ashton T.; Spangler, Dale P.; Rueppel, Melvin L.

PATENT ASSIGNEE(S): SOURCE:

Monsanto Company, USA PCT Int. Appl., 440 pp.

CODEN: PIXXD2

3

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	TENT NO.	KIND	DATE	APPLICATION NO.	DATE			
	2000018721 W: AE, AL, A CZ, DE, D	A1 M, AT, AU K, DM, EE	20000406 , AZ, BA, , ES, FI,	WO 1999-US22119 BB, BG, BR, BY, CA, GB, GD, GE, GH, GM,	19990923 < CH, CN, CR, CU, HR, HU, ID, IL,			
	MG, MK, M	N, MW, MX	, NO, NZ,	KZ, LC, LK, LR, LS, PL, PT, RO, RU, SD,	SE, SG, SI, SK,			
				UG, US, UZ, VN, YU,				
				SZ, TZ, UG, ZW, AT, IT, LU, MC, NL, PT,				
				MR, NE, SN, TD, TG	3E, BF, BU, CF,			
CA	2345118	M, GA, GN A1	20000406	CA 1999-2345118	19990923 <			
	9960594	A1	20000417	CA 1999-2345118 AU 1999-60594 EP 1999-969710	19990923 <			
	1115693	A1	20010718	EP 1999-969710	19990923 <			
	R: AT, BE, C	H, DE, DK	, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,			
	IE, SI, L	T, LV, FI	, RO		•			
JP	2002525348	T	20020813	JP 2000-572183	19990923			
				EP 2005-11025	19990923			
EP	1589000							
	R: AT, BE, C IE, FI, C	H, DE, DK Y	E, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,			
PT	1115695	T	20051031	PT 1999-948429	19990923			
ES	2244216	T3	20051201	ES 1999-948429	19990923			
US	2003083331	A1	20030501	US 2002-154861	20020523			
	6696435	B2	20040224					
US	2003109528	Δ1	20030612	US 2002-155002	20020523			
US	6699898 2003114454	B2	20040302					
US	2003114454	A1	20030619	US 2002-155311	20020523			
US	6/10069	D2	20040323	•	B 10000005			
PRIORITY	APPLN. INFO.:	•		US 1998-101663P EP 1999-948429	P 19980925			
		•		US 1999-405524	A3 19990923			
				WO 1999-US22119				
				US 2001-991085				
				US 2001-991208				
				US 2001-991116				
OTHER SO	DURCE(S):		132:2649	53				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. (I) [wherein R1 = haloakyl, haloalkenyl, AB haloalkoxyalkyl, or haloalkenyloxyalkyl; R2 = H, OH, (alkyl)amino, dialkylamino, (un) substituted (cyclo) alkyl, (cyclo) alkenyl, (cyclo) alkoxy, (cyclo) alkenyloxy, or (hetero) aryl, alkylsulfinyl, arylsulfonyl, carboxy,

carboxamido, phosphono, etc.; R3, R14, and R15 = independently H, OH, halo, CN, (un)substituted (cyclo)alkyl, (cyclo)alkenyl, alkynyl, or (hetero) aryl, aryloxy, (alkyl) amino, dialkylamino, (hetero) arylthio, acylamido, alkylsufinyl, arylsufonyl, carboxy, phosphono, etc.; or R2 and R3 taken together may form a 3- to 8-membered cycloalkyl, a 5- to 8-membered cycloalkenyl, or a 4- to 8-membered heterocyclyl ring; R4-R13 = independently (un)substituted aryloxy, alkyl(oxy), acyl(oxy), carboxamido, (cyclo)alkylsulfinyl, aralkylsulfonyl, amino, phosphono, etc.; R16 = H, (un) substituted (cyclo) alkyl, (cyclo) alkenyl, alkynyl, or (hetero) aryl, acyl, (hetero)aroyl, trialkylsilyl, or a spacer; D1, D2, D3, D4, J1, J2, J3, J4, K1, and K2 = independently C, N, O, S, or a covalent bond; X = H, F, O, S, S(O), NH, N(OH), N(alky1), or N(alkoxy); Y and Z = independentlysingle bond or (un) substituted (hetero) alkylene; n = 0-5] where prepared for the treatment of atherosclerosis and other coronary artery diseases. I are useful as inhibitors of cholesteryl ester transfer protein (CETP; plasma lipid transfer protein-I). Examples include over 700 syntheses and data from two bioassays on CETP activity. For instance, reaction of 3-bromoaniline with 3-(1,1,2,2-tetrafluoroethoxy) benzaldehyde in the presence of NaB(OAc)3H and AcOH formed the secondary amine (96%). Addition of 1,1,1-trifluoro-2,3-epoxypropane in CH2Cl2 and YB(OTf)3 gave the alc. (99%), which was silylated with tert-butyldimethylsilyl trifluoromethanesulfonate (58%). Heating a solution of the tertiary amine with 4-chloro-3-ethylphenol, Cs2CO3, copper triflate benzene complex, and 1-naphthoic acid in 2:1 toluene:dimethylacetamide for 96 h gave II (23%). The latter inhibited CETP activity with IC50 values of 0.034 μM and 0.88 μM , resp., in the reconstituted buffer and human plasma assays. 263345-16-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compound; preparation of substituted polycyclic aryl and heteroaryl tertiary-heteroalkylamines as cholesteryl ester transfer protein inhibitors for the treatment of atherosclerosis and other coronary artery disease)

RN 263345-16-0 CA

2-Propanol, 1,1,1-trifluoro-3-[[3-(4-piperidinylthio)phenyl][[3-(1,1,2,2-tetrafluoroethoxy)phenyl]methyl]amino]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 23 OF 66 CA COPYRIGHT 2007 ACS on STN

6

ACCESSION NUMBER:

132:141951 CA

TITLE:

IT

CN

Pharmaceutical compositions containing ACAT and MMP inhibitors for the treatment of atherosclerotic

lesions

INVENTOR(S):

Bocan, Thomas Michael Andrew Warner-Lambert Company, USA

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 222 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
PATENT NO.
                                DATE
                                            APPLICATION NO.
                         KIND
                                                               DATE
                                -----
                                            -----
                                                                     -----
     -----
                         ____
     WO 2000004892
                         A2
                                20000203
                                            WO 1999-US13948
                                                                     19990618 <--
                         A3
                                20000518
     WO 2000004892
        W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                          A1
                                20000203
                                          CA 1999-2335062
     CA 2335062
                                                                     19990618 <--
                                20000214
                                            AU 1999-47017
     AU 9947017
                          Α
                                                                     19990618 <--
                                          BR 1999-12296
EP 1999-930483
                                20010417
     BR 9912296
                          Α
                                                                     19990618 <--
                                20010516
     EP 1098662
                          A2
                                                                    19990618 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     TR 200100205
                         T2
                                20010521
                                            TR 2001-200100205
                                                                     19990618 <--
                         Α
                                20020617 EE 2001-46
     EE 200100046
                                                                     19990618
                        A2
                                          HU 2001-2880
                                20020629
     HU 200102880
                                                                    19990618
                        T
A
A
A
A
                                20020716 JP 2000-560885
     JP 2002521328 🛴
                                                                   19990618
                      Ā
                                20050401 IN 2001-MN19
     IN 2001MN00019
                                                                    20010104
                                                                    20010110
     ZA 2001000294
                                20020110
                                           ZA 2001-294
                                            BG 2001-105162
     BG 105162
                                20011231
                                                                   20010117 <--
                                            NO 2001-291
     NO 2001000291
                                20010118
                                                                    20010118 <--
                        A1
A
                                            HR 2001-55
     HR 2001000055
                                20020430
                                                                    20010119
     IN 2001MN00455
                                20050318
                                             IN 2001-MN455
                                                                    20010424
                                                              P 19980721
W 19990618
PRIORITY APPLN. INFO.:
                                             US 1998-93639P
                                             WO 1999-US13948
```

AB Acyl-CoA: cholesterol acyltransferase (ACAT) and matrix metalloproteinase (MMP) inhibitors are coadministered for the reduction of both the macrophage and smooth muscle cell component of atherosclerotic lesions, thus impairing the expansion of existing lesions and the development of new lesions and for the prevention of plaque rupture and the promotion of lesion regression in a mammal. The direct antiatherosclerotic potential of the combination of ACAT inhibitor, [[2,4,6-tris-(1-methyl)phenyl]acetyl]-2,6-bis(1-methylethyl)phenyl sulfamic acid, and the HMG-CoA reductase inhibitor, simavastatin, in rabbits was studied. A tablet contained 2-(4'-bromobiphenyl-4-sulfonylamino)-3-Me butyric acid 25 ACAT compound lactose 50, corn starch 20, and magnesium stearate 5 mg.

IT 210915-24-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. containing ACAT and MMP inhibitors for treatment of atherosclerotic lesions)

RN 210915-24-5 CA

CN 2-Piperidinecarboxamide, N-hydroxy-1-[[4-(phenylthio)-1piperidinyl]sulfonyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 24 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 131:295100 CA

TITLE: N-Substituted Adenosines as Novel Neuroprotective A1

Agonists with Diminished Hypotensive Effects

AUTHOR(S): Knutsen, Lars J. S.; Lau, Jesper; Petersen, Hans;

Thomsen, Christian; Weis, Jan U.; Shalmi, Michael; Judge, Martin E.; Hansen, Anker Jon; Sheardown,

Malcolm J.

CORPORATE SOURCE: Health Care Discovery and Development, Novo Nordisk

A/S, Malov, DK-2760, Den.

SOURCE: Journal of Medicinal Chemistry (1999),

42(18), 3463-3477

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English The synthesis and pharmacol. profile of a series of neuroprotective adenosine agonists are described. Novel A1 agonists with potent central nervous system effects and diminished influence on the cardiovascular system are reported and compared to selected reference adenosine agonists. The novel compds. featured are derived structurally from two key lead structures: 2-chloro-N-(1-phenoxy-2-propyl)adenosine (NNC 21-0041) and 2-chloro-N-(1-piperidinyl)adenosine (NNC 90-1515). The agonists are characterized in terms of their in vitro profiles, both binding and functional, and in vivo activity in relevant animal models. Neuroprotective properties assessed after postischemic dosing in a Mongolian gerbil severe temporary forebrain ischemia paradigm, using hippocampal CA1 damage endpoints, and the efficacy of these agonists in an Al functional assay show similarities to some reference adenosine agonists. However, the new compds. described exhibit diminished cardiovascular effects in both anesthetized and awake rats when compared to reference A1 agonists such as (R)-phenylisopropyladenosine (R-PIA), N-cyclopentyladenosine (CPA), NNC 90-1515, N-[(1S,trans)-2hydroxycyclopentyl]adenosine (GR 79236), N-cyclohexyl-2'-O-methyladenosine (SDZ WAG 994), and N-[(2-methylphenyl)methyl]adenosine (Metrifudil). mouse permanent middle cerebral artery occlusion focal ischemia, 2-chloro-N-[(R)-[(2-benzothiazolyl)thio]-2-propyl]adenosine (NNC 21-0136) exhibited significant neuroprotection at the remarkably low total i.p. dose of 0.1 mg/kg, a dose at which no cardiovascular effects are observed in conscious rats. The novel agonists described inhibit 6,7-dimethoxy-4ethyl- β -carboline-3-carboxylate-induced seizures, and in mouse locomotor activity higher doses are required to reach ED50 values than for reference Al agonists. Thus, it was concluded that two of the novel adenosine derivs. revealed herein, NNC 21-0136 and 5'-deoxy-5'-chloro-N-[4-(phenylthio)-1-piperidinyl]adenosine (NNC 21-0147), representatives of a new series of P1 ligands, reinforce the fact that novel selective adenosine A1 agonists have potential in the treatment of cerebral ischemia in humans.

IT 169190-51-6P, NNC 21-0147

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of N-substituted adenosines as novel neuroprotective Al agonists with diminished hypotensive effects)

RN169190-51-6 CA

Adenosine, 2,5'-dichloro-5'-deoxy-N-[4-(phenylthio)-1-piperidinyl]- (9CI) CN (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 124 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: 124

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

CA COPYRIGHT 2007 ACS on STN L11 ANSWER 25 OF 66

ACCESSION NUMBER:

131:110909 CA

TITLE:

Synthesis and analgesic activity of some deaza

derivatives of anpirtoline

AUTHOR (S):

Radl, Stanislav; Hezky, Petr; Proska, Jan; Krejci,

Ivan

CORPORATE SOURCE:

Research Inst. Pharmacy Biochemistry, Prague, 13060,

Czech Rep.

SOURCE:

Archiv der Pharmazie (Weinheim, Germany) (1999

), 332(1), 13-18

CODEN: ARPMAS; ISSN: 0365-6233

PUBLISHER:

Wiley-VCH Verlag GmbH

DOCUMENT TYPE:

Journal

LANGUAGE: English AB

New deaza derivs. of anpirtoline have been synthesized by three different methods. Their receptor binding profiles (5-HT1A, 5-HT1B) and analgesic activity (hot plate, acetic acid induced writhing) have been studied.

TT 223684-91-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(synthesis and analgesic activity of some deaza derivs. of anpirtoline)

RN 223684-91-1 CA

Piperidine, 4-[(5-chloro-2-nitrophenyl)thio]-1-methyl-, monohydrochloride CN (CA INDEX NAME)

● HCl

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS 11 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 26 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

131:44741 CA

TITLE:

Urethanes derived from azacycloalkanes, thio and dithio analogues, production and use thereof as 2,3-epoxysqualene lanosterol cyclase inhibitors Maier, Roland; Muller, Peter; Schilcher, Gebhard;

INVENTOR (S):

Adelgoss, Gebhard; Hurnaus, Rudolf; Mark, Michael;

Eisele, Bernhard

PATENT ASSIGNEE(S):

Boehringer Ingelheim Pharma KG, Germany

SOURCE:

PCT Int. Appl., 63 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PAT	CENT	NO.			KIND DATE A					APPLICATION NO.					DATE			
WO	9929	669					1999	0617	1	WO 1	998-	EP79	65		15	9981	208	<
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	
		KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	
		MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	
		TT,	UA,	ŪĠ,	UZ,	VN,	YU,	ZW										
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	ΝL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	
		•	•	GN,		•	•	•	•	-								
DE	1975	4796														9971	210	<
	2309										998-					9981:	208	<
ΑU	9917	594			Α		1999	0628		AU 1	999-	1759	4		19	9981	208	<
	9813										998-		_			9981	208	<
TR	2000															9981	208	<
	1060						2000	1220		EP 1	998-	9624	23		19	9981	208	<
EΡ	1060						2003											
	R:								GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO											
	2001						2001	0730	1	HU 2	001-	335			19	9981:	208	<
	2001						2001	1128										
	2000						2001	0815]	EE 2	000-	342			19	9981:	208	<
	2001						2001			JP 2	000-	5242	56		19	9981:	208	<
	3418						2003											
	2348										998-		_			9981:	208	
ES	2190	130			Т3	;	2003	0716	1	ES 1	998-	9624:	23		19	9981:	208	

PT 10	060162	T	20030829	PT	1998-962423		19981208	
ZA 98	811262	Α	20000609	ZA	1998-11262		19981209	<
IN 20	000MN00026	Α	20050617	IN	2000-MN26		20000425	
MX 20	00004622	A	20001110	MX	2000-4622		20000512	<
BG 10	04500	Α	20010330	ВG	2000-104500		20000602	<
HR 20	000000377	A1	20001231	HR	2000-377		20000607	<
NO 20	000002967	Α	20000809	NO	2000-2967		20000609	<
PRIORITY A	APPLN. INFO.:			DE	1997-19754796	Α	19971210	
				WO	1998-EP7965	W	19981208	

OTHER SOURCE(S):

MARPAT 131:44741

GΙ

$$R^{1-Q}$$
 $N-C-Y-R$

AB Approx. 20 piperidine hydrochlorides [I, R = benzyl, Ph, p-tolyl, p-ClC6H4, p-FC6H4; R1 = p-Me2NC6H4, 4-piperidinomethylphenyl; X, Y = 0, S; Q = S, CO, CH2, SO] were prepared by standard methods and were tested as anticholesteremics and fungicides. E.g., the MIC for I (R = benzyl, R1 = p-Me2NC6H4, X = Y = Q = S) against Trichophyton mentagrophytes was 1 μ g/mL.

IT 227100-33-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and pharmacol. activity of aminomethylphenylpiperidino carbamates)

RN 227100-33-6 CA

CN 1-Piperidinecarbodithioic acid, 4-[[4-[(dimethylamino)methyl]phenyl]thio]-, phenylmethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ \text{Ph-CH}_2-\text{S-C} & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

• HCl

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

PECORD ALL CITATIONS AVAILABLE IN THE PE FORMA

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 27 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

131:31935 CA

TITLE:

Preparation of aminobenzothiazoles as

neuroprotectants.

INVENTOR(S):

Mantegani, Sergio; Cremonesi, Paolo; Varasi, Mario;

Speciale, Carmela

PATENT ASSIGNEE(S):

Pharmacia & Upjohn S.p.A., Italy

SOURCE:

PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

		APPLICATION NO.	
WO 9928318	A1 19990610	WO 1998-EP7532	19981123 <
W: AL, AU, BA,	BB, BG, BR, CA,	CN, CU, CZ, EE, GE,	HR, HU, ID, IL,
		LR, LT, LV, MG, MK,	
PL, RO, SG,	SI, SK, SL, TR,	TT, UA, US, UZ, VN,	YU, AM, AZ, BY,
	RU, TJ, TM		
RW: GH, GM, KE,	LS, MW, SD, SZ,	UG, ZW, AT, BE, CH,	CY, DE, DK, ES,
FI, FR, GB,	GR, IE, IT, LU,	MC, NL, PT, SE, BF,	BJ, CF, CG, CI,
CM, GA, GN,	GW, ML, MR, NE,	SN, TD, TG	
CA 2313050	A1 19990610	CA 1998-2313050	19981123 <
AU 9915621	' A 19990616	AU 1999-15621	19981123 <
		EP 1998-959879	
		GB, GR, IT, LI, LU,	
	LV, FI, RO		
		JP 2000-523210	19981123 <
		US 2000-554612	
		GB 1997-25541	
		WO 1998-EP7532	W 19981123
	MARPAT 131:3193	•	
GI			•

Title compds. [I; X = CO, C:NOH, CHOH, CH2; Y = CH2, CH2CH2R2; R2 = H, OH, PhO, amino, CO2R4, etc.; R4 = alkyl, (R1-substituted) Ph; Z = (CH2)n; n = 0-4; R1 = H, halo, cyano, alkyl, alkoxy, CF3], were prepared Thus, 1-(2-acetylaminobenzothiazol-6-yl)-2-bromoethane, 4-benzylpiperidine, and K2CO3 were heated in DMF at 75° for 2 h to give 67% 1-(2-aminobenzothiazol-6-yl)-2-(4-benzylpiperidin-1-yl)ethane (II). In mixed cortical neuronal cultures exposed to NMDA, II showed neuroprotective activity with EC50 = 0.64 μM, vs. 2.26 μM for eliprodil.

Ι

IT 226996-40-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminobenzothiazoles as neuroprotectants)

RN 226996-40-3 CA

CN 2-Benzothiazolamine, 6-[2-[4-(phenylthio)-1-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & N & CH_2 - CH_2 \\ \hline \\ & PhS \end{array}$$

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 28 OF 66 CA COPYRIGHT 2007 ACS on STN

9

ACCESSION NUMBER:

131:18929 CA

TITLE:

Preparation of arylsulfonylheterocyclylhydroxamic

acids and related compounds as matrix metalloprotease

inhibitors

INVENTOR(S):

Barta, Thomas E.; Becker, Daniel P.; Boehm, Terri L.; De Crescenzo, Gary A.; Villamil, Clara I.; McDonald,

Joseph J.; Freskos, John N.; Getman, Daniel P.

PATENT ASSIGNEE(S):

SOURCE:

G.D. Searle and Co., USA PCT Int. Appl., 840 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 5

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
		WO 1998-US23242	
W: AL, AM, A	T, AU, AZ, BA, BB,	BG, BR, BY, CA, CH,	CN, CU, CZ, DE,
DK, EE, E	S, FI, GB, GD, GE,	GH, GM, HR, HU, ID,	IL, IS, JP, KE,
KG, KP, K	R, KZ, LC, LK, LR,	LS, LT, LU, LV, MD,	MG, MK, MN, MW,
MX, NO, N	Z, PL, PT, RO, RU,	SD, SE, SG, SI, SK,	SL, TJ, TM, TR,
TT, UA, U	G, US, UZ, VN, YU,	ZW	•
RW: GH, GM, K	E, LS, MW, SD, SZ,	UG, ZW, AT, BE, CH,	CY, DE, DK, ES,
FI, FR, G	B, GR, IE, IT, LU,	MC, NL, PT, SE, BF,	BJ, CF, CG, CI,
	N, GW, ML, MR, NE,		
CA 2306460	. A1 19990527	CA 1998-2306460	19981112 <
AU 9913732	A 19990607	AU 1999-13732	19981112 <
AU 756150	B2 20030102	BR 1998-14643	
BR 9814643	A 20001003	BR 1998-14643	19981112 <
EP 1042290	A1 20001011	EP 1998-957485	19981112 <
R: AT, BE, C	H, DE, DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, PT, IE, FI
JP 2001523662	T 20011127	JP 2000-521071 NZ 1998-503485 RU 2000-115948 ZA 1998-10412	19981112 <
NZ 503485	A 20021025	NZ 1998-503485	19981112
RU 2250105	C2 20050420	RU 2000-115948	19981112
ZA 9810412	A 19991209	ZA 1998-10412	19981113 <
US 2001014688	A1 20010816	US 1998-191129	19981113 <
NO 2000002469	A 20000712	NO 2000-2469	20000512 <
US 6541489 US 2002177588	B1 20030401	US 2000-554082	20000731
US 2002177588	A1 20021128		20010917
	B2 20040615	•	
US 2004048852		US 2003-337942	20030107
	B2 20050510		
	A1 20060420	US 2005-46645	
PRIORITY APPLN. INFO.:		US 1997-66007P	
		US 1998-95347P	
		US 1998-95501P	
		US 1998-101080P	
		WO 1998-US23242	W 19981112

US 1999-256948 B3 19990224 US 2000-554082 A3 20000731 A3 20030107

US 2003-337942

OTHER SOURCE(S):

GΙ

MARPAT 131:18929

Ι

AB A process for treating conditions associated with pathol. matrix metalloproteinase (MMP) activity comprises administration of compds. having inhibitory activity against >1 of MMP-2, MMP-9, and MMP-13, while exhibiting substantially less inhibition of MMP-1. The compds. are of the form HONHCOCR1R2SO2R3 [R1, R2 = H; R1R2 = atoms to form a 5-8 membered ring containing 1-3 heteroatoms; R3 = (substituted) aryl, heteroaryl]. 4-PhOC6H4SH was heated in Me2SO to give the disulfide dimer, which in THF was added to a mixture of Et N-tert-butoxycarbonylisonipecotate (preparation given) and LDA in THF at -60° to room temperature to give 405 sulfide, which was oxidized with m-ClC6H4CO(OOH) to give 59% sulfone. The Et ester was saponified with NaOH in EtOH/H2O to give 100% acid, which in DMF was treated with hydroxybenzotriazole, EDC, 4-methylmorpholine, and aqueous NH2OH to give title compound (I). I inhibited MMP-2 with IC50 = 0.2 nM. IT188527-03-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of arylsulfonylheterocyclylhydroxamic acids and related compds. as matrix metalloprotease inhibitors)

ВN 188527-03-9 CA

CN 1-Piperidinecarboxylic acid, 4-[(4-bromophenyl)thio]-, 1,1-dimethylethyl (CA INDEX NAME) ester (9CI)

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

6

L11 ANSWER 29 OF 66

CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

REFERENCE COUNT:

130:325074 CA

TITLE:

Molecular modification of anpirtoline, a non-opioid

centrally acting analgesic

AUTHOR (S):

Radl, Stanislav; Hafner, Wieland; Hezky, Petr; Krejci,

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

Ivan; Proska, Jan; Taimr, Jan

CORPORATE SOURCE:

Research Institute of Pharmacy and Biochemistry,

Prague, 130 60/3, Czech Rep.

SOURCE:

Collection of Czechoslovak Chemical Communications (

1999), 64(2), 363-376

CODEN: CCCCAK; ISSN: 0010-0765

Institute of Organic Chemistry and Biochemistry, PUBLISHER:

Academy of Sciences of the Czech Republic

Journal DOCUMENT TYPE: English LANGUAGE:

AB Mol. modification of anpirtoline is described. Several methods of preparation of 4-[(3-chlorophenyl)sulfanyl]-1-methylpiperidine and its demethylation led to the deazaanpirtoline. Nucleophilic substitution of piperidine-4-thiole with 2-chloro-4-nitropyridine, 2,4-dichloro-6methylpyridine, and 3,6-dichloropyridazine led to 2-chloro-4-(piperidin-4ylsulfanyl)pyridine, 4-chloro-6-methyl-2-(piperidin-4-ylsulfanyl)pyridine, and 3-chloro-6-(piperidin-4-ylsulfanyl)pyridazine, resp. 2-Chloro-6-(pyridin-4-ylsulfanyl)-pyridine and 4-[(2-chloropyridin-6yl)sulfanyl]quinoline (11)were obtained from sodium 2-chloropyridine-6thiolate. Homoanpirtoline analogs with a methylene group inserted between the pyridine moiety and the sulfur atom as well as between the sulfur atom

223684-98-8P IT

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and analgesic activity of anpirtoline analogs)

RN 223684-98-8 CA

CN Piperidine, 4-[(3-chlorophenyl)thio]-, hydrochloride (9CI) (CA INDEX NAME)

HCl

THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 23 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 30 OF 66 CA COPYRIGHT 2007 ACS on STN

and the piperidine ring were also prepared

ACCESSION NUMBER:

129:313134 CA

TITLE:

Combinatorial libraries of peptidomimetic

aminothioether acids

INVENTOR(S):

Mendel, David

PATENT ASSIGNEE(S): SOURCE:

Eli Lilly and Co., USA PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND PATENT NO. DATE APPLICATION NO. DATE ---------______ -----A1 19981022 WO 1998-US7151 WO 9846786 19980408 <--W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,

KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG CA 1998-2286862 19980408 <--19981022 CA 2286862 A1 AU 1998-69620 19980408 <--19981111 AU 9869620 Α 20000126 EP 1998-915437 19980408 <--EP 973936 **A1** R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI JP 1998-544062 19980408 JP 2002504892 Т 20020212 19970411 US 1997-43496P P PRIORITY APPLN. INFO.: WO 1998-US7151 W 19980408

OTHER SOURCE(S): MARPAT 129:313134

AB The present invention relates to a novel diverse library of aminothioether compds. and derivs. thereof, and their possible use as lead compds. in drug development. Methods are presented for the preparation of these peptidomimetic compds. The general method used to prepare the diverse libraries of amino thioether acid compds. utilizes com. available or readily synthesized amino acids or amino alcs. and mercapto acids. An apparatus providing a readily accessible source of individual members of the library is also described. The apparatus can be used in assay kits and as a replaceable element in automated assay machines.

IT 214838-74-1P

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(combinatorial libraries of peptidomimetic aminothioether acids)

RN 214838-74-1 CA

CN

1-Piperidinecarboxylic acid, 4-[(2-carboxyphenyl)thio]-,

1-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 31 OF 66 CA COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 129:148991 CA

Preparation of N-sulfamoylpiperidine-2-hydroxamic TITLE: acids and analogs as metalloproteinase inhibitors Broka, Chris Allen; Campbell, Jeffrey Allen; INVENTOR(S): Castelhano, Arlindo Lucas; Chen, Jian Jeffrey; Hendricks, Robert Than; Melnick, Michael Joseph; Walker, Keith Adrian Murray F. Hoffmann-La Roche A.-G., Switz.; Agouron PATENT ASSIGNEE(S): Pharmaceuticals, Inc. Ger. Offen., 84 pp. SOURCE: CODEN: GWXXBX Patent DOCUMENT TYPE: LANGUAGE: German FAMILY ACC. NUM. COUNT: PATENT INFORMATION: DATE APPLICATION NO. PATENT NO. KIND DATE ----_____ -----_____ -----19980730 DE 1998-19802350 19980122 <--DE 19802350 **A1** CA 1998-2278694 A1 19980730 19980114 <--CA 2278694 С 20060926 CA 2278694 WO 9832748 A1 19980730 WO 1998-EP180 19980114 <--W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG Α 19980818 AU 1998-66140 19980114 <--AU 9866140 AU 730127 B2 . 20010222 19991124 EP 1998-907943 19980114 <--EP 958287 **A1** 20020911 EP 958287 B1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO BR 9807508 Α 20000321 BR 1998-7508 19980114 <--NZ 336625 Α 20010427 NZ 1998-336625 19980114 <--HU 200000941 A2 20010428-HU 2000-941 19980114 <--Т JP 1998-531537 19980114 <--JP 2001523222 20011120 20040908 B2 JP 3563411 AT 223909 T 20020915 AT 1998-907943 19980114 CN 1093125 В 20021023 CN 1998-803233 19980114 T PT 958287 PT 1998-907943 19980114 20021231 ES 2183331 T3 ES 1998-907943 19980114 20030316 Α ZA 1998-376 19980116 <--ZA 9800376 19980723 A IN 1998-MA105 19980116 IN 1998MA00105 20050304 IT 1298163 B1 19991220 IT 1998-MI91 19980120 <--FR 2758559 A1 19980724 FR 1998-601 19980121 <--GB 2321641 Α 19980805 GB 1998-1393 19980122 <--В GB 2321641 20010401 **A1** 19980122 <--ES 2136037 19991101 ES 1998-113 В1 ES 2136037 20001116 NO 9903587 Α 19990922 NO 1999-3587 19990722 <--B1 NO 313635 20021104 MX 9906822 Α 20000131 MX 1999-6822 19990722 <--P 19970123 PRIORITY APPLN. INFO.: US 1997-36714P US 1997-62209P P 19971016

W 19980114

WO 1998-EP180

OTHER SOURCE(S): MARPAT 129:148991

GT

R10COCR1R2NR3SO2NR2OR21 [I; R1-R3 = H, (CO-interrupted) alkyl, AB heterocyclyl(alkyl), (hetero)aryl(alkyl), etc.; R1R2, R1R3, R2R3 = atoms to complete a ring; R10 = NR11OR12; R11,R12 = H or (ar)alkyl; R20,R21 = H, alkyl, (hetero)aryl[alk(en)yl], etc.; NR20R21heterocyclyl] were prepared Thus, (R)-1-[4-(4-chlorobenzoyl)piperidine-1-sulfonyl]piperidine-2carboxylic acid was amidated by H2NOCMe3 and the product deprotected to give title compound (R)-II. Data for biol. activity of I were given.

II

IT 210913-65-8P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-sulfamoylpiperidine-2-hydroxamic acids and analogs as metalloproteinase inhibitors)

RN210913-65-8 CA

Propanamide, 2-[[[4-[(4-chlorophenyl)thio]-1-piperidinyl]sulfonyl]amino]-N-CN hydroxy-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 32 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

127:278413 CA

TITLE:

Preparation of nucleosides for treating disorders

related to cytokines in mammals

INVENTOR(S):

Knutsen, Lars; Olsen, Uffe Bang; Bowler, Andrew Neil Novo Nordisk A/S, Den.

PATENT ASSIGNEE(S):

PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English 1 .

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----------_ _ _ _ _____ WO 1997-DK108 19970312 <--WO 9733591 A1 19970918 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,

```
DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
              LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
              RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN
          RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,
              ML, MR, NE, SN, TD, TG
                                     19970918
                                                  WO 1997-DK107
     WO 9733590
                             A1
                                                                             19970312 <--
              AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
              LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
              RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN
          RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,
              ML, MR, NE, SN, TD, TG
                                     19971001
                                                  AU 1997-20224
     AU 9720224
                             Α
                                                                             19970312 <--
                                     19971001
                                                                             19970312 <--
     AU 9720225
                             Α
                                                  AU 1997-20225
     IN 1997MA00517
                             Α
                                    20050304
                                                  IN 1997-MA517
                                                                             19970312
                             Α
                                    20050304
                                                  IN 1997-MA518
     IN 1997MA00518
                                                                             19970312
                             Α
                                     19971010
                                                  ZA 1997-2190
     ZA 9702190
                                                                             19970313 <--
     ZA 9702193
                                     19971021
                                                  ZA 1997-2193
                                                                             19970313 <--
PRIORITY APPLN. INFO.:
                                                  DK 1996-293
                                                                             19960313
                                                  DK 1996-591
                                                                             19960521
                                                  DK 1996-590
                                                                             19960521
                                                  WO 1997-DK107
                                                                         W
                                                                             19970312
                                                  WO 1997-DK108
                                                                             19970312
OTHER SOURCE(S):
                            MARPAT 127:278413
```

GΙ

AB Preparation of nucleosides I (R1 = heterocycle, imino; X = H, halo, amino, perhalomethyl, cyano, alkyl, alkoxy, alkylthio, alkylamino, Ph; A = vinyl, CH2R2, R2 = Oh, H, Cl, Br, F, CN, NH2, MeO) for treating disorders related to cytokines such as TNF α in mammals. The disorder is an auto-immune disorder, inflammation, arthritis, multiple sclerosis, stroke, osteoporosis, septic shock or menstrual complications. Thus, 2-chloro-N-methoxyadenosine was prepared and tested for its auto-immune disorder and showed LPS-induced TNF α inhibition rat whole blood (IC50 = 3.0 μ M).

IT 151666-11-4
 RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of nucleosides for treating disorders related to cytokines in mammals)

RN 151666-11-4 CA

CN Adenosine, 2-chloro-N-[4-(phenylthio)-1-piperidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 33 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

127:176434 CA

TITLE:

Angiogenesis inhibiting pyridazinamines

INVENTOR(S):

Stokbboekx, Raymond Antoine; Van Der Aa, Marcel Jozef Maria; Willems, Marc; Meerpoel, Lieven; Luyckx, Marcel

Gerebernus Maria; Tuman, Robert W.

PATENT ASSIGNEE(S):

Janssen Pharmaceutica N.V., Neth.; Stokbroekx, Raymond Antoine; Van Der Aa, Marcel Jozef Maria; Willems,

Antoine; Van Der Aa, Marcel Jozef Maria; Willems, Marc; Meerpoel, Lieven; Luyckx, Marcel Gerebernus

Maria; Tuman, Robert W.

SOURCE:

PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.				APPLICATION NO.	
WO 9726258		A1	19970724	WO 1997-EP201	19970114 <
W: AL,	AM, AU,	BB, BG	, BR, CA,	CN, CU, CZ, EE, GE,	HU, IL, IS, JP,
KG,	KR, LC,	LK, LR	, LT, LV,	MD, MG, MN, MX, NO,	NZ, PL, RO, SG,
SI,	SK, TR,	TT, UA	, US, UZ,	VN, AM, AZ, BY, KG,	KZ, MD, RU, TJ, TM
RW: KE,	LS, MW,	SD, SZ	, UG, AT,	BE, CH, DE, DK, ES,	FI, FR, GB, GR,
IE,	IT, LU,	MC, NL	, PT, SE,	BF, BJ, CF, CG, CI,	CM, GA, GN, ML,
MR,	NE, SN,	TD, TG	;		
CA 2237273		A1	19970724	CA 1997-2237273	19970114 <
AU 9714439		Α	19970811	AU 1997-14439	19970114 <
AU 717744		B2	20000330		
ZA 9700288		Α	19980714	ZA 1997-288	19970114 <
EP 876366		A2	19981111	EP 1997-901059	19970114 <
EP 876366		B1	20010725		
R: AT,	BE, CH,	DE, DK	, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, PT, IE,
SI,	LT, LV,	FI, RO)		
CN 1208415		Α	19990217	CN 1997-191705	19970114 <
CN 1104430		В	20030402		

JP 200050	3014 Т	20000314	TD	1997-524656		19970114	
JP 200050	3014 1	20000314	JP	1331-324636		199/0114	<
IL 124461	. A	20000726	$_{ m IL}$	1997-124461		19970114	<
AT 203534	\mathbf{T}	20010815 A	$\mathbf{T}A$	1997-901059		19970114	<
ES 216223	5 T3	20011216 H	ES	1997-901059		19970114	<
PT 876366	T	20020130 · F	PΤ	1997-901059		19970114	
TW 480256	В	20020321	ΓW	1997-86100703		19970123	
NO 980203	7 A	19980915 N	ON	1998-2037		19980505	<
NO 309653	B1	20010305					
US 598587	8 A	19991116 U	JS	1998-119075		19980709	<
GR 303690	O T3	20020131	ЗR	2001-401770		20011016	
PRIORITY APPLN	. INFO.:	I	EΡ	1996-200085	A	19960115	
		I	EΡ	1997-901059	Α	19970114	
		V	OW	1997-EP201	W	19970114	

OTHER SOURCE(S): MARPAT 127:176434

Ι

GΙ

$$\begin{array}{c|c}
R^2 & R^3 \\
N & N = N
\end{array}$$

$$\begin{array}{c|c}
R^3 & NR^4R^5$$

AB Title compds. I [R1 = H, alkyl, alkoxy, alkylthio, amino, aryl, cycloalkyl, CH2OH, CH2OCH2Ph; R2, R3 = H; R2R3 = CH:CHCH:CH; NR4R5 = heterocyclic] were prepared Thus, 3-chloro-6-methylpyridazine was treated with SOCl2 and HN:CHMeNH2.HCl to give the chloropyridazinylthiadiazole which was treated with 1-(3-trifluoromethylphenyl)piperazine to give I [R1 = Me, R2, R3 = H, NR4R5 = 4-(3-trifluoromethylphenyl)piperazino]. This compound had an in vitro angiogenesis inhibiting IC50 of 0.3 nM.

IT 193956-93-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiadiazolylpyrazinylamines as angiogenesis inhibitors) 193956-93-3 CA

CN Pyridazine, 3-[4-[(3-chlorophenyl)thio]-1-piperidinyl]-6-(3-methyl-1,2,4-thiadiazol-5-yl)- (9CI) (CA INDEX NAME)

L11 ANSWER 34 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

127:135730 CA

TITLE:

RN

Preparation of 4-substituted piperidine analogs as subtype selective N-methy-D-aspartate receptor

antagonists

INVENTOR(S):

Bigge, Christopher F.; Cai, Sui Xiong; Weber, Eckard; Woodward, Richard; Lan, Nancy C.; Keana, John F. W.;

Zhou, Zhang-Lin; Wright, Jonathan; et al.

PATENT ASSIGNEE(S):

Warner-Lambert Company, USA; Cocensys, Inc.; Bigge,

Christopher F.; Cai, Sui Xiong; Weber, Eckard;

Woodward, Richard; Lan, Nancy C. PCT Int. Appl., 137 pp.

SOURCE: PCT Int. Appl

· CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

1

FAMILY ACC. NUM. COUNT:

PAT	PATENT NO.					KIND DATE				APPLICATION NO.									
WO	9723				A1		1997	0703	V	VO 1	996-	US20	766			19961			
	W:				AU,														
					FI,														
					LT,														
					SE,														
	RW:				SD,														
					MC,			SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA	, GN,	ML,		
		•	-	SN,	TD,														
	9610				Α											19961			
					A1														
	9714				A		1997	0717	I	AU 1	997-	1431	0			19961			
	7194				B2 A1		2000	0511											
EP	8697	91			A1		1998	1014	E	EP 1	996-	9445	37			19961	220	<	
EP	8697	91			B1		2003	0507											
	R:				DE,			FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE	, MC,	PT,		
		ΙE,	SI,	LT,	LV,	FI,	RO												
HU	9901	033			A2		1999	0728	F	łU 1	999-	1033				19961	220	<	
	9901				A 1		2002	0128											
	9612				A A		1999	1228	E							19961			
	3257									IZ 1	996-	3257	35			19961	220	<	
JP	2000	5023	52		\mathbf{T}		2000	0229								19961			
US	6130	234 ,			A		2000	1010	τ	JS 1	996-	9159	4			19961	220	<	
AT	2394	73			T A		2003	0515	P	\T 1	996-	9445	37			19961	220		
${\tt IL}$	1250	60			Α		2003]	[L 1	996-	1250	60			19961			
PT	8697	91			T		2003	0829	I	PT 1	996-	9445	37			19961	220		
ES	2196	196			Т3		2003	1216	E	ES 1	996-	9445	37			19961	220		
ИО	9802	869			Α		1998	0824	N	10 1	998-	2869				19980	619	<	
NO	3120	28			B1 B1 B1		2002	0304											
BG	6342	4			B1		2002	0131	· E	3G 1	998-	1025	61 、			19980	619		
	6448				B1		2002	0910	· ·)S Z	000-	コソムロ	83			20000	0 I 3		
US	2003	10513	33		A1		2003	0605	τ	JS 2	002-	2065	78			20020	729		
PRIORITY	APP	LN.	INFO	. :					τ	JS 1	995-	9192	P		P	19951	222		
									τ	JS 1	996-	9159	4		A1	19961	220		
									V	VO 1	996-	US20'	766		W	19961	220		
									τ	JS 1	998-	9159	4		A1	19980	618		
									τ	JS 2	000-	5928	83		A3	19980 20000	613		
OTHER SC GI	URCE	(S):			MARP.	AT	127:	1357	30										

$$R^{1}$$
 R^{4}
 Z
 $N-CH_{2}(CH_{2})_{n}QAr^{2}$

The title compds. [I; Ar1, Ar2 = (un)substituted aryl, heteroaryl, etc.; z = single or double bond; X = (CHR2)m, O, S, etc.; R1 = H, OH; R2 = H, OH, lower alkoxy, etc.; m = 0-2; n = 0-2; Q = CH:CH, C.tplbond.C; R4 = H, OH, etc.] are prepared I are useful as selectively active antagonists of N-methy-D-aspartate (NMDA) receptor subtypes for treating conditions such as stroke, cerebral ischemia, central nervous system trauma, hypoglycemia, anxiety, convulsions, aminoglycoside antibiotics-induced hearing loss, migraine headache, glaucoma, CMV retinitis, chronic pain, opioid tolerance or withdrawals, or neurodegenerative disorders, such as lathyrism, Alzheimer's Disease, Parkinsonism and Huntington's disease. Thus, piperidine analog (II; X = H) was reacted with 3-butynyl tosylate in the presence of NaHCO3 to give the title compound II (X = HC.tplbond.C(CH2)2), which exhibited selectivity for 2B subtype receptors compared to 2A, 2C and 2D subtype receptors.

IT 192989-82-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 4-substituted piperidine analogs as subtype selective N-methy-D-aspartate receptor antagonists)

RN 192989-82-5 CA

CN Acetamide, N-[4-[4-[4-(phenylthio)-1-piperidinyl]-1-butynyl]phenyl]- (9CI) (CA INDEX NAME)

PhS NHAC NH2-CH2-C
$$\equiv$$
 C

L11 ANSWER 35 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

127:121611 CA

TITLE:

Discovery of selective dopamine D4 receptor

antagonists: 1-aryloxy-3-(4-aryloxypiperidinyl)-2-

propanols

AUTHOR (S):

Wright, Jon L.; Gregory, Tracy F.; Heffner, Thomas G.;

Mackenzie, Robert G.; Pugsley, Thomas A.; Vander

Meulen, Seth; Wise, Lawrence D.

CORPORATE SOURCE:

Division of Warner-Lambert Company, Departments of Chemistry and Therapeutics, Parke-Davis Pharmaceutical

Research, Ann Arbor, MI, 48105, USA

SOURCE:

Bioorganic & Medicinal Chemistry Letters (1997

), 7(11), 1377-1380

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: DOCUMENT TYPE: Elsevier Journal

LANGUAGE:

English

High volume screening identified 3-(4-benzylpiperidinyl)-1-naphthoxy-2propanol as a selective dopamine D4 receptor ligand. A systematic structure-activity study revealed that the benzyl group could be replaced with phenoxy and the naphthalene with Ph to improve potency almost tenfold. The (R) enantiomer of this compound had a D4 affinity of 2 nM and

was over 100-fold weaker at dopamine D2 and D3 receptors.

TT 192823-32-8P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and dopamine D4 receptor antagonist activity of (aryloxypiperidinyl) propanols).

RN192823-32-8 CA

1-Piperidineethanol, α -[(1-naphthalenyloxy)methyl]-4-(phenylthio)-(9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 36 OF 66 CA COPYRIGHT 2007 ACS on STN

8

ACCESSION NUMBER:

127:17595 CA

TITLE:

Preparation of benzamide derivatives as gastrointestinal movement modulators

INVENTOR(S):

Takadoi, Masanori; Kobayashi, Fumiyoshi; Sekiquchi,

PATENT ASSIGNEE(S):

Kyorin Pharmaceutical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

1

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
JP 09077742	A 1997	0325 JP 1995-259319	19950912 <			
WO 9710207	A1 19970	0320 WO 1996-JP2605	19960912 <			
W: AU, CA, CN	, HU, KR, US					
RW: AT, BE, Ch	, DE, DK, ES,	FI, FR, GB, GR, IE, IT,	LU, NL, PT, SE			
AU 9669445	A 19970	0401 AU 1996-69445	19960912 <			
PRIORITY APPLN. INFO.:		JP 1995-259319	A 19950912			
		WO 1996-JP2605	W 19960912			
OTHER SOURCE(S):	MARPAT 127:	17595				

GI

$$R^{2}$$
 $CONA-N$
 CO

AB The title compds. (I; R1 = H, lower alkyl alkoxycarbonyl, acyl; R2 = lower alkoxy, F; R3 = H, lower alkyl; R4 = lower alkyl; X = single bond, O, S, NH, CO, OCO, NHCO, etc.; A = ethylene, 1,4-phenylene, etc.; m = 1-3; n = 0-2; p = 0-3; q = 1-3) are prepared I, having potent stimulation of 5-HT4 receptor, are useful as gastrointestinal movement modulators. Thus, 4-amino-5-chloro-2-methoxybenzoic acid was treated with ClCO2Et in the presence of Et3N and then reacted with 1-(2-aminoethyl)-4-(3,4,5trimethoxybenzyloxy)piperidine to give 24% the title compound (II). II showed EC50 of 6.5 X 10-8 M against 5-HT4 receptor when tested on rats. IT 188558-56-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzamide derivs. as gastrointestinal movement modulators) 188558-56-7 CA

Ι

CN Benzamide, 4-amino-5-chloro-2-methoxy-N-[2-[4-[(3,4,5trimethoxyphenyl)thio]-1-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{OMe} \\ \text{MeO} & \text{N} \\ \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{C} \\ \text{MeO} & \text{NH}_2 \\ \end{array}$$

CA COPYRIGHT 2007 ACS on STN L11 ANSWER 37 OF 66

ACCESSION NUMBER:

126:305785 CA

TITLE:

RN

Preparation of substituted pipecolinic acid

derivatives as HIV protease inhibitors

INVENTOR(S): Anderson, Paul C.; Soucy, Francedilla; Yoakim,

Christiane; Lavallee, Pierre; Beaulieu, Pierre L. Bio-Mega/Boehringer Ingelheim Research Inc., Can. U.S., 17 pp., Cont.-in-part of U.S. Ser. No. 850,716,

abandoned.

PATENT ASSIGNEE(S):

SOURCE:

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.		DATE	APPLICATION NO.	
			19970325	US 1994-336637 ES 1993-103712	
ES	2066623	T 3	19950301	ES 1993-103712	19930309 <
WO	9318003	A1 ·	19930916	WO 1993-CA96	19930312 <
	W: AU, CA, CZ	, FI, HU	, KR, NO,	NZ, PL, RU, SK, UA	
	RW: BF, BJ, CF	, CG, CI	, CM, GA,	GN, ML, MR, SN, TD, TO	G .
	9301776			ZA 1993-1776	
AU	9338808	Α	19931005	AU 1993-38808	19930312 <
AU	670582	B2	19960725		
HU	70617	A2 ·	19951030	HU 1994-2613	19930312 <
CA	2131185	C	19970527	CA 1993-2131185	19930312 <
IL	105035	A	19970713	IL 1993-105035	19930312 <
\mathtt{PL}	176362	B1	19990531	PL 1993-305166	19930312 <
SK	280161	В6	19990910	SK 1994-1090	19930312 <
CZ	285589	В6	19990915		
	2140911		19991110	RU 1994-40841	19930312 <
JP	06073004	Α	19940315		19930315 <
ĴР	3258422	B2	20020218		
CN	1096293	Α	19941214	CN 1993-106794	19930608 <
	9403383	A	19940912		
	9404217	A	19940913	FI 1994-4217	19940913 <
	5807870	A	19980915		
				US 1992-850716	
		•	•	US 1993-25703	
				WO 1993-CA96	
					A3 19941109

OTHER SOURCE(S): MARPAT 126:305785

Title compds. I [X = terminal group such as aryloxycarbonyl, alkanoyl, or AB optionally mono- or disubstituted carbamoyl; B = absent or amino acid residue, for example, Val or Asn; R1 = H or ring substituent, for example, F or Me; R2 = alkyl; Y = ring substituent, for example, PhO, 2-pyridinylmethoxy, PhS, or 2-pyridinylthio] are disclosed as compds. inhibit the activity of HIV protease and interfere with HIV induced cytopathogenic effects in human cells. These properties render the compds. useful for combating HIV infections. Thus, reaction of piperidinecarboxamide II (preparation given) with epoxide III (Boc = Me3CO2C) gave title compound I (X = Boc, B = absent, R1 = H, R2 = CMe3, Y = SPh) (IV). Acidic deprotection of IV, peptide coupling with Boc-Val-OH, further acidic deprotection, and amidation with 2-quinolinecarboxylic acid gave title compound I (X = 2-quinolylcarbonyl, B = Val, R1 = H, R2 = CMe3, Y = SPh). Recombinant HIV protease inhibitory activity of 79 title compds. I showed IC50 = 2100 to 1.5 nM.

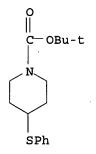
IT 154612-64-3P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted pipecolinic acid derivs. as HIV protease inhibitors)

RN154612-64-3 CA

CN1-Piperidinecarboxylic acid, 4-(phenylthio)-, 1,1-dimethylethyl ester (CA INDEX NAME)



L11 ANSWER 38 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

126:238391 CA TITLE:

Preparation of (di)azinylcarbonyl(di)azines as

oxidosqualene cyclase inhibitors

INVENTOR(S): Brown, George Robert; Stokes, Elaine Sophie Elisabeth;

Waterson, David; Wood, Robin

PATENT ASSIGNEE(S): Zeneca Limited, UK; Brown, George Robert; Stokes,

Elaine Sophie Elisabeth; Waterson, David; Wood, Robin

SOURCE: PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT NO.				KIND		DATE		•	APPLICATION NO.						DATE			
WO 9706802 W: AL, AM, AT					A1	-	19970227			WO 1996-GB1985					19960814 <			
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	
		ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LK,	LR,	LS,	
		LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	
		SE,	SG,	SI,	SK,	ТJ,	TM,	TR,	TT,	UA,	UG,	US,	UΖ,	VN,	AM,	AZ,	BY,	
					RU,													

```
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA
                                              CA 1996-2226735
     CA 2226735
                           Α1
                                 19970227
                                                                      19960814 <--
     AU 9667485
                                 19970312
                                              AU 1996-67485
                                                                      19960814 <--
                           Α
     EP 844877
                           A1
                                 19980603
                                              EP 1996-927782
                                                                      19960814 <--
     EP 844877
                                 20050126
                           В1
         R:
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI
     CN 1193276
                                 19980916
                                              CN 1996-196278
                                                                      19960814 <--
                           Α
                           Т
     JP 11511161
                                 19990928
                                              JP 1996-509050
                                                                      19960814 <--
     AT 287715
                           Т
                                 20050215
                                              AT 1996-927782
                                                                      19960814
     US 6090813
                           Α
                                 20000718
                                              US 1998-11718
                                                                      19980213 <--
PRIORITY APPLN. INFO.:
                                              GB 1995-16709
                                                                      19950815
                                              WO 1996-GB1985
                                                                   W
                                                                      19960814
OTHER SOURCE(S):
                          MARPAT 126:238391
GI
```

piperidinyl]carbonyl] - (9CI) (CA INDEX NAME)

Title compds. [I; A = bond or alkylene; G, T1-T3 = CH or N (T2 ≠ T3 AB = CH); Q = cycloalkyl, heterocyclyl, phenyl(alkyl), etc.; R1 = H, halo, NH2, cyano, alkyl, alkoxy; X = 0, SO0-2, CO, CONH, etc.; G1, G2 = 1 or 2 CH2; G3, G4 = 0 or 1 CH2; m = 1 or 2] were prepared Thus, 1-(4-pyridyl)piperidine-4-carbonyl chloride (preparation given) was amidated by 3-methyl-1-(2-naphthylsulfonyl)piperazine to give title compound II. Data for biol. activity of 1 prepared I were given. 179050-55-6P IT RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of (di)azinylcarbonyl(di)azines as oxidosqualene cyclase inhibitors) RN 179050-55-6 CA Piperidine, 4-(2-naphthalenylthio)-1-[[1-(4-pyridinyl)-4-CN

II

CA COPYRIGHT 2007 ACS on STN L11 ANSWER 39 OF 66

ACCESSION NUMBER:

TITLE:

Preparation of aminoheterocyclic derivatives as

antithrombotic or anticoagulant agents

Faull, Alan Wellington; Mayo, Colette Marie; Preston, INVENTOR(S):

John; Stocker, Andrew Zeneca Limited, UK

PCT Int. Appl., 161 pp.

CODEN: PIXXD2

125:114690 CA

DOCUMENT TYPE:

LANGUAGE:

SOURCE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

	PATENT NO.			KIN	KIND DATE			APPLICATION NO.											
		9610	022 AM, GB,	AT, GE, MK,	AU, HU,	A1 BB, IS,	BG,		0404 BY, KG,	CA, KP,	O 1 CH, KR,	995- CN, KZ,	GB22 CZ, LK,	85 DE, LR,	DK, LT,	EE, LU,	925 < FI, MD,	:	
		RW:	KE, LU,	MW,	NL,			AT, BF,											
	CA	2197	471			A1		1996	0404	(CA 1	995-	2197	471		1	9950	925 <	;
	AU	9535	307			Α		1996	0419	1	AU 1	995-	3530	7		1	9950	925 <	(- -
	AU	6964	91			B2		1998	0910										
	EР	7835	00			A1		1997	0716	I	EP 1	995-	9321	28		1	9950	925 <	ξ
	ΕP	7835	00 .			B1		1998	0722										
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	IT,	LI,	LU,	MC,	NL,	PT,	SE
	BR	9509	045	•	Ī	A	•	1997	0930	I	3R 1	995-	9045		-	1	9950	925 <	; - -
•	CN	1164	232			Α		1997	1105	(CN 1	995-	1963	37		1	9950	925 <	: - -
	JP	1050	6122			T		1998	0616	ن	JP 1	995-	5114	99		1	9950	925 <	ζ
	ΑТ	1686	85			T		1998	0815	7	AT 1	995-	9321	28		1	9950	925 < 925 < 925 < 925 <	(- -
	HU	7776	9			A2		1998	0828	·	TU 1	997-	2052			1	9950	925 <	:
	ES	2119	472			Т3		1998	1001	I	ES 1	995-	9321	28		1	9950	925 <	(- -
		2853						1999	0714	(CZ 1	997-	893			1	9950	925 <	;
	ZA	9508				Α												926 <	
	NO	9701	415			Α		1997	0522	ľ	NO 1	997-	1415			1	9970	325 <	; - -
	US	5965	559			Α		1999	1012	τ	JS 1	997-	8170	31		1	9970	326 <	: - -
	US	6225	309			В1		2001	0501	τ	JS 1	999-	3698	57		1	9990	809 <	; - -
	US	2002						2002				001-							
		6730						2004	0504										
PRIOR	RITY	APP								(3B 1	994 -	1934	1		A 1	9940	926	
										C	3B 1	994 -	2578	9		A 1	9941	221	
										C	3B 1	995- 995-	1105	1		A 1	9950	601	
										V	VO 1	995-	GB22	85	1	W 1	9950	925	
										τ	JS 1	997-	8170	31		A3 1	9970	326	

US 1999-369857 A3 19990809

OTHER SOURCE(S):

MARPAT 125:114690

GI

Ι

$$N - CO - N - N$$

The title compds. [I; G1, G2, G3 = CH, N; m = 1, 2; R1 = H, halo, C1-4 AB alkyl; M1 = (substituted) piperidino, piperazino, etc.; A = bond, C1-4 alkylene; M2 = piperazino, etc.; M3 = bond, etc.; X = SO2; Q = naphthyl, heterocyclyl] were prepared and formulated. Treatment of 1-(4-pyridyl)piperidine-4-carboxylic acid with SOC12 followed by addition of 1-tert-butoxycarbonylpiperazine, deprotection of the intermediate II (Y = Boc) with HCl/Et2O and reaction of piperazine II.3HCl (Y = H) with 2-naphthylsulfonyl chloride afforded I [G1, G2, G3 = CH; R1 = H; M1 = piperidino; A, M3 = bond; M2 = piperazino; X = SO2; Q = 2-naphthyl]. In general, compds. I showed IC50 of 0.001-25 μM against Factor Xa and of > 50 μ M against thrombin.

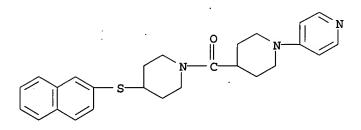
IT 179050-55-6P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminoheterocyclic derivs. as antithrombotic or anticoagulant agents)

179050-55-6 CA ВN

Piperidine, 4-(2-naphthalenylthio)-1-[[1-(4-pyridinyl)-4-CN piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)



L11 ANSWER 40 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

123:305981 CA

TITLE:

Anticonvulsant actions of novel and reference

adenosine agonists

AUTHOR (S):

Knutsen, Lars J. S.; Lau, Jesper; Sheardown, Malcolm J.; Eskesen, Karen; Thomsen, Christian; Weis, Jan U.;

Judge, Martin E.; Klitgaard, Henrik

CORPORATE SOURCE:

Novo Nordisk Pharmaceuticals Division, Malov, DK 2760,

Den.

SOURCE:

Adenosine and Adenine Nucleotides: From Molecular Biology to Integrative Physiology, [Proceedings of the International Symposium on Adenosine and Adenine Nucleotides] -- 5th, Philadelphia, May 9-13, 1994 (1995), Meeting Date 1994, 479-89. Editor(s): Belardinelli, Luiz; Pelleg, Amir. Kluwer: Boston,

Mass.

DOCUMENT TYPE:

CODEN: 61SUAT Conference English

LANGUAGE:

The authors demonstrated that a range of novel 2-substituted adenosine analogs with alkylated nitrogen and oxygen atoms on the 6-amino group have anticonvulsant effects, in some cases with high potency, in the DMCM-induced clonic seizure model in mice after i.p. administration. However, the potent cardiovascular effects of the above agonists led the authors to examine another range of adenosine agonists, represented by 2-chloro-N-(1-methyl-2-phenoxyethyl)adenosine (I), with milder cardiovascular effects. I maintained a potent effect in the mouse DMCM-induced clonic seizure model, as well as a separation between anticonvulsant and ataxic doses, and therefore represents a prototype adenosine agonist for future CNS drug development in this field.

IT 170032-16-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anticonvulsant actions of adenosine agonists)

RN 170032-16-3 CA

CN 9H-Purine, 2-chloro-6-[4-(phenylthio)-1-piperidinyl]-9-β-Dribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 41 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

123:286531 CA

TITLE:

Preparation of adenosine derivatives for treatment of

central nervous system diseases

INVENTOR (S):

Lau, Jesper; Knutsen, Lars Jacob Stray

PATENT ASSIGNEE(S):

Novo Nordisk A/S, Den.

SOURCE:

PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.			APPLICATION NO.	DATE
					
WO 950	7921	A1	19950323	WO 1994-DK344	19940915 <
W :	• •			CN, CZ, EE, FI, GE,	
	KP, KR,	KZ, LK,	LT, LV, MD,	MG, MN, MW, NO, NZ,	PL, RO, RU, SD,
	SI, SK,	TJ, TT,	UA, US, UZ,	VN .	
RW:	AT, BE,	CH, DE,	DK, ES, FR,	GB, GR, IE, IT, LU,	MC, NL, PT, SE
US 5589	9467	A	19961231	US 1994-306232	19940914 <
CA 217	1940	A1	. 19950323	CA 1994-2171940	19940915 <
AU 9476	5519	Α	19950403	AU 1994-76519	19940915 <
AU 6780)53	B2	19970515	;	
EP 7192	275	A1	19960703	EP 1994-926815	19940915 <
R:	AT, BE,	CH, DE,	DK, ES, FR,	GB, GR, IE, IT, LI,	LU, MC, NL, PT, SE
JP 115	11436	T	19991005	JP 1994-508922	19940915 <
ZA 9407		A		ZA 1994-7201	19940916 <
FI 9601	219	A	19960515	FI 1996-1219	19960315 <
NO 9601	071	A	19960515	NO 1996-1071	19960315 <
PRIORITY API	LN. INFO	.:		DK 1993-1043	A 19930917
			•	DK 1994-310	A 19940316
•				WO 1994-DK344	W 19940915
OMITTED GOTTEGT	1/01.	MAD	DAM 102.00CE		

OTHER SOURCE(S):

MARPAT 123:286531

GΙ

The title compds. I [X is halogen, amino, perhalomethyl, cyano, C1-6-alkoxy, C1-6-alkylthio or C1-6-alkylamino; A is Me, halomethyl, cyanomethyl, aminomethyl, vinyl, methylthiomethyl or methoxymethyl; R1 is selected from optionally substituted N-bonded heterocyclics] are prepared 2,5'-Dichloro-5'-deoxy-N-(1-piperidinyl)adenosine (II) (preparation given) showed ED50 of 0.4 mg/Kg against DMCM-induced seizures in in animals. In the in vitro test for the binding to the adenosine A1 receptors, II showed Ki value of 6.4 nM.

IT 169190-51-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of adenosine derivs. for treatment of central nervous system diseases)

RN 169190-51-6 CA

CN Adenosine, 2,5'-dichloro-5'-deoxy-N-[4-(phenylthio)-1-piperidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 42 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

122:265361 CA

TITLE:

Preparation of 3-aryl-5-[(4-aryloxy- and

-thiopiperidino)alkyl]oxazolidin-2-ones as nervous

system agents

INVENTOR(S):

Pruecher, Helmut; Gottschlich, Rudolf; Bartoszyk,

Gerd; Seyfried, Christoph

PATENT ASSIGNEE(S):

Merck Patent G.m.b.H., Germany

SOURCE:

Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

German

1

FAMILY ACC. NUM. COUNT:

PAT	TENT NO.		KIND	DATE	APPLICATION NO.	DATE
	<i>C</i> 35505	-	7.7	10050125	ED 1004 110701	10040712
	635505		A1		EP 1994-110781	19940712 <
\mathbf{EP}	635505		B1	19971015		
	R: AT, BE	CH,	DE, D	K, ES, FR,	GB, GR, IE, IT, LI, LU,	NL, PT, SE
DE	4324393		A1	19950126	DE 1993-4324393	19930721 <
ΑT	159252		\mathbf{T}	19971115	AT 1994-110781	19940712 <
ES	2110660		T3	19980216	ES 1994-110781	19940712 <
SK	281630		B6	20010611	SK 1994-852	19940714 <
ΑU	9467536		Α	19950202	AU 1994-67536	19940715 <
AU	683886		B2	19971127		
TW	401417		В	20000811	TW 1994-83106530	19940718 <
CA	2128380		A1	19950122	CA 1994-2128380	19940719 <
CA	2128380		C	20050412		
CZ	284544		В6	19981216	CZ 1994-1738	19940719 <
PL	177692		B1	20000131	PL 1994-304349	19940719 <
NO	9402715		Α	19950123	NO 1994-2715	19940720 <
ZA	9405340		Α	19950301	ZA 1994-5340	19940720 <
JP	07070117		A	19950314	JP 1994-168105	19940720 <

CN 1106008	Α	19950802	CN	1994-107977		19940720 <
CN 1055690	В	20000823				
RU 2135495	C1 .	19990827	RU	1994-26079		19940720 <
HU 71110	A2	19951128	HU	1994-2154		19940721 <
HU 218912	В	20001228				
US 5561145	Α	19961001	US	1994-278210		19940721 <
PRIORITY APPLN. INFO.:			DE	1993-4324393	Α	19930721
OTHER SOURCE(S):	MARPAT	122:265361				
GI						

$$\mathbb{R}^{2}X$$
 \mathbb{N}
 $\mathbb{N}^{\mathbb{N}}$
 $\mathbb{N}^{\mathbb{N}}$

AB Title compds. [I; R1,R2 = (un)substituted Ph; X = O, SOO-2; m = 1-3] were prepared as nervous system agents (no data). Thus, (5R)-5-methanesulfonyloxymethyl-3-(p-methoxyphenyl)oxazolidin-2-one was condensed with 4-(p-acetamidophenoxy)piperidine to give (5S)-I [R1 = 4-(MeO)C6H4, R2 = 4-(AcHN)C6H4, X = O, m = 1].

IT 162401-91-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 3-aryl-5-[(4-aryloxy- and

Ι

-thiopiperidino)alkyl]oxazolidin-2-

ones as nervous system agents)

RN 162401-91-4 CA

CN Acetamide, N-[4-[[1-[[3-(4-methoxyphenyl)-2-oxo-5-oxazolidinyl]methyl]-4-piperidinyl]thio]phenyl]-, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

L11 ANSWER 43 OF 66 CA COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 121:272191 CA

INVENTOR(S):

Oxoquinolinecarboxylic acid derivatives, TITLE:

> oxonaphthyridinecarboxylic acid derivatives, their preparation, and their use as cell adhesion inhibitors Miyake, Akio; Nakamura, Masahira; Fukushi, Hideto

PATENT ASSIGNEE (S): Takeda Chemical Industries, Ltd., Japan

Eur. Pat. Appl., 49 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 614664	A1	19940914	EP 1994-103366	19940305 <
EP 614664	B1	19980916		
EP 614664	B2	20030108		
R: AT, BE, CH,	DE, DK	, ES, FR, C	GB, GR, IE, IT, LI, LU	, NL, PT, SE
AU 9456437	A	19940915	AU 1994-56437	19940228 <
AU 669416	B2	19960606		
AT 171068	T	19981015	AT 1994-103366	19940305 <
NO 9400789	A	19940912	NO 1994-789	19940307 <
JP 06316522	A	19941115	JP 1994-35879	19940307 <
CA 2117224	A1	19940910	CA 1994-2117224	19940308 <
FI 9401082	A	19940910	FI 1994-1082	19940308 <
US 5519024	Α	19960521	US 1994-207091	19940308 <
CN 1099029	A	19950222	CN 1994-102273	19940309 <
HU 70043	A2	19950928	HU 1994-703	19940309 <
US 5703081	Α .	19971230	US 1996-608697	19960229 <
US 5889009	A	19990330	US 1997-931453	19970917 <
US 5889009	C1	20020507		
PRIORITY APPLN. INFO.:			JP 1993-47917	A 19930309
			US 1994-207091	A3 19940308
			US 1996-608697	A3 19960229

OTHER SOURCE(S): CASREACT 121:272191; MARPAT 121:272191

Compns. are disclosed which include a 1,7-disubstituted-4-oxo-3quinolinecarboxylic acid or 1,7-disubstituted-4-oxo-3naphthyridinecarboxylic acid derivative (Markush included). The compds. of the invention are useful as prophylactic and/or therapeutic agents for peripheral arterial obstruction, acute myocardial infarction, antitumor agents, and as prophylactic and/or therapeutic agents for osteoporosis. Preparation of compds. of the invention is described. 6,8-Difluoro-7-(4methylpiperazin-1-yl)-1-(thiazol-2-yl)methyl-1,4-dihydro-4-oxoquinoline-3carboxylic acid hydrochloride (I) was prepared from 1-(thiazol-2-yl)methyl-6,7,8-trifluoro-1,4-dihydro-4-oxoquinoline-3-carboxylic acid and 4-methylpiperazine. Tablet and injection formulations of I are included, as is inhibitory activity against binding of GPIIb/IIIa and fibrinogen for I and other compns. of the invention.

IT 124278-06-4

> RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oxoquinolinecarboxylic acid derivs., oxonaphthyridinecarboxylic acid derivs., their preparation, and their use as cell adhesion inhibitors) 124278-06-4 CA

CN 3-Quinolinecarboxylic acid, 1-cyclopropyl-6,8-difluoro-1,4-dihydro-4-oxo-7-(4-piperidinylthio) - (9CI) (CA INDEX NAME)

RN

L11 ANSWER 44 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

121:108848 CA

TITLE:

Pyrimidines useful in treatment of neurological

disorders

INVENTOR(S):

Awaya, Akira; Horikomi, Kazutoshi; Sasaki, Tadayuki; Kobayashi, Hisashi; Mizuchi, Akira; Nakano, Takuo; Tomino, Ikuo; Araki, Shintaro; Takesue, Mitsuyuki; et

al.

PATENT ASSIGNEE(S):

Mitsui Petrochemical Industries, Ltd., Japan; Mitsui

Pharmaceuticals, Inc.

SOURCE:

U.S., 29 pp. Cont.-in-part of U.S. Ser. No. 347,892,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE ·	APPLICATION NO.	DATE
US 5304555	Α	19940419	US 1990-600171	19901019 <
CN 1079742	Α	19931222	CN 1993-103112	19930317 <
PRIORITY APPLN. INFO.:			JP 1987-210170 A	19870826
			US 1989-347892 B2	19890425
•			CN 1988-106967 A	19880826
OTHER SOURCE(S):	MARPAT	121:108848		

OTHER SOURCE(S)

GI

AB Pyrimidine compds. and their pharmaceutically acceptable salts were disclosed. The compds. are useful for neurol. diseases of the peripheral and central nervous systems of animals. An example compound, 5,7-dihydro-7-methyl-2-(1-piperidinyl)-6H-pyrrolo[2,3-d]pyrimidin-6-one (I) was prepared The biol. activity of I was higher than that of isaxonine or mecobalamin.

IT 122112-89-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as central nervous system agent)

RN 122112-89-4 CA

CN 6H-Pyrrolo[2,3-d]pyrimidin-6-one, 5,7-dihydro-7-methyl-2-[4-(phenylthio)-1-piperidinyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 45 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

121:57997 CA

TITLE:

Preparation of pipecolinic acid derivatives as HIV

protease inhibitors

INVENTOR(S):

Anderson, Paul Cates; Soucy, Francois; Yoakim,

Christiane; Lavallee, Pierre; Beaulieu, Pierre Louis Bio-Mega/Boehringer Ingelheim Research Inc., Can.

PATENT ASSIGNEE(S):

Eur. Pat. Appl., 40 pp.

SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE:

PE: Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

						APPLICATION NO.		
						EP 1993-103712		
EP	560268			B1	19950104			
	R: AT,	BE,	CH,	DE, D	K, ES, FR,	GB, GR, IE, IT, LI,	LU, M	C, NL, PT, SE
						ES 1993-103712		
WO	9318003			A 1	19930916	WO 1993-CA96		19930312 <
	W: AU,	CA,	CZ,	FI, H	U, KR, NO,	NZ, PL, RU, SK, UA		•
						GN, ML, MR, SN, TD,		
ZA	9301776	•	•	A	19930924	ZA 1993-1776		19930312 <
						AU 1993-38808		
					19960725			
HU	70617			A2	19951030	HU 1994-2613		19930312 <
CA	2131185			С	19970527	CA 1993-2131185		19930312 <
						IL 1993-105035		
\mathtt{PL}	176362			B1	19990531	PL 1993-305166		19930312 <
						SK 1994-1090		
						CZ 1994-2232		
	2140911					RU 1994-40841		
JP	06073004			Α	19940315			
JP	3258422			B2	20020218			
CN	1096293			Α		CN 1993-106794		19930608 <
NO	9403383			A	19940912	NO 1994-3383		19940912 <
FI	9404217			Α	19940913	FI 1994-4217		19940913 <
	Y APPLN.					US 1992-850716		
						WO 1993-CA96		

OTHER SOURCE(S):

MARPAT 121:57997

GI

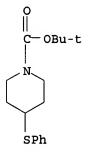
AB Title compds. I (X = R302C, R3CO, R3NR4CO) wherein R3 = alkyl, cycloalkyl,(substituted) Ph, phenylalkyl, 1-, 2-naphthyl, 5,6-membered heterocyclyl or -heterocyclyalkyl, 2-, 3-quinolinyl, H, alkyl, R3AOCH2CO wherein R3A = (substituted) Ph; B = NHCHR5CO wherein R5 = alkyl, cycloalkyl, PhCH2, etc., or absent; R1 = H, halo, H0, alkyl, alkoxy; R2 = alkyl; Y = alkyl, cycloalkyl, (substituted) Ph, -PhCH2, W(CH2)nZ wherein W = O, S, SO, SO2, Z = alkyl, (substituted) Ph, heterocyclyl, n = 0, 1) or a salt thereof, useful for treating HIV infections in humans, are prepared I (X = Boc, B is absent, R1 = H; R2 = Me3C, Y = PhS) (preparation given) was converted to the deprotected amine as the HCl salt which in CH2Cl2, EtN(CHMe2)2, Boc-Val-OH and (benzotriazol-1-oxy)tris(dimethylamino)phosphonium hexafluorophosphate (BOP) were added to give I (X = Boc, B = Val, R1 = H, R2 = Me3C, Y = PhS). This is 6N HCl/dioxane was stirred at room temperature for 20 min to give the deprotected amine as HCl salt which in CH2Cl2 was added to 2-quinolinecarboxylic acid and BOP to give I (X = quinolinylcarbonyl, B = Val, R1 = H, R2 = Me3C, Y = PhS) which in recombinant HIV protease assay had IC50 3.1 nM and EC50 12 nM.

IT 154612-64-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(preparation and reaction of, in preparation of HIV inhibitors)

RN 154612-64-3 CA

CN 1-Piperidinecarboxylic acid, 4-(phenylthio)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L11 ANSWER 46 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

121:26237 CA

TITLE:

The synthesis and biochemical evaluation of new Al selective adenosine receptor agonists containing

6-hydrazinopurine moieties

AUTHOR (S):

Knutsen, Lars J. S.; Lau, Jesper; Sheardown, Malcolm

J.; Thomsen, Christian

CORPORATE SOURCE:

Dep. Med. Chem., Novo Nordisk Pharmaceuticals, Inc.,

Maaloev, DK 2760, Den.

SOURCE:

Bioorganic & Medicinal Chemistry Letters (1993

), 3(12), 2661-6

CODEN: BMCLE8; ISSN: 0960-894X

DOCUMENT TYPE:

Journal English

LANGUAGE:
AB The sy

The synthesis and SAR of a series of novel derivs. of N-aminoadenosine is described, along with their in vitro effects in biochem. assays. The rat brain A1 adenosine receptor binding of these compds. is very dependent upon the purine 2-substituent. The novel agonist, 2-chloro-N-[4-(phenylthio)-1-piperidinyl]adenosine, exhibits a Ki value for A1 receptor binding of <1 nM.

IT 151666-11-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and Al-adenosine receptor agonist activity of)

RN 151666-11-4 CA

CN Adenosine, 2-chloro-N-[4-(phenylthio)-1-piperidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 47 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

120:54902 CA

TITLE:

Preparation of 2,6-disubstituted purine nucleoside

anticonvulsants

INVENTOR(S):

Knutsen, Lars Jacob Stray; Lau, Jesper

PATENT ASSIGNEE(S):

SOURCE:

Novo Nordisk A/S, Den. PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	I	KIND DATE	APPLICATION NO.	DATE
WO 9308206		A1 19930429	WO 1992-DK307	19921021 <
W: AU, 1	BG, CA, C	CS, FI, HU, JP,	KR, NO, PL, RO, RU	
RW: AT,	BE, CH, I	DE, DK, ES, FR,	GB, GR, IE, IT, LU, MC	, NL, SE
US 5432164		A 19950711	US 1992-963878	19921020 <
AU 9229160		A 19930521	AU 1992-29160	19921021 <
AU 657374		B2 19950309	e e e e e e e e e e e e e e e e e e e	
EP 609375		A1 19940810	EP 1992-923113	19921021 <
R: AT, 1	BE, CH, I	DE, DK, ES, FR,	GB, GR, IE, IT, LI, LU	MC, NL, SE
JP 07500586		T 19950119	JP 1992-507362	19921021 <
IL 103513		A 19960912	L 1992-103513	19921022 <

ZA 9208222	Α	19940425	ZA	1992-8222		19921023	<
FI 9401876	Α	19940622	FI	1994-1876		19940422	<
NO 9401477	Α	19940623	NO	1994-1477		19940422	<
US 5578582	Α	19961126	US	1995-435005		19950505	<
PRIORITY APPLN. INFO.:			WO	1991-DK324	A	19911024	
			US	1992-963878	A3	19921020	
			WO	1992-DK307	Α	19921021	

MARPAT 120:54902

OTHER SOURCE(S):

GI

AB Title nucleosides I [R = halo, perhalomethyl, CN, alkoxy, alkylthio, alkylamino; R1 = (un)substituted N-bonded heterocyclics], were prepared as anticonvulsants. Thus, compound I [R = Cl, R1 = (3-phenoxy-1-piperidinyl)] was prepared and tested in mice against clonic convulsions ED50 of 1.0 mg/kg and adenosine agonist binding ratio A2/A1 of 158.

IT 151666-11-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 151666-11-4 CA

CN Adenosine, 2-chloro-N-[4-(phenylthio)-1-piperidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 48 OF 66 CA COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 119:180819 CA

Preparation of pyrroloazepines as cardiovascular TITLE:

agents.

Mīzuno, Akira; Miya, Mikiko; Inomata, Norio; Tatsuoka, INVENTOR(S):

Toshio; Ishihara, Takafumi

Suntory, Ltd., Japan PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 75 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

1

LANGUAGE:

GI

FAMILY ACC. NUM. COUNT:

Japanese

PATENT INFORMATION:

PATENT NO.		APPLICATION NO.	DATE
WO 9303032	A1 19930218	WO 1992-JP1009	19920806 <
W: AU, CA, JP,			
		, GR, IE, IT, LU, MC,	NL, SE
CA 2093630		CA 1992-2093630	
-	C 20040106		
		AU 1992-24030	19920806 <
**		AU 1992-24030	19920806 (
*** *	B2 19940113		
EP 557526	A1 19930901	EP 1992-916814	19920806 <
EP 557526	B1 20030402		
		, GR, IE, IT, LI, LU,	
JP 3242653	B2 20011225	JP 1993-503481	19920806 <
AT 236163	T 20030415	AT 1992-916814	19920806
ES 2196000	T3 20031216	ES 1992-916814	19920806
US 5399557	A 19950321	US 1993-30427	19930407 <
PRIORITY APPLN. INFO.:		JP 1991-221192	A 19910807
		WO 1992-JP1009	A 19920806
OTHER SOURCE(S):	CASREACT 119:180819	9; MARPAT 119:180819	

$$Z^{1}$$
 Z^{1}
 Z^{1

The title compds. [I; II; Z1 = H; when the dotted line is not present, Z1 AB = H, Z2 = OH; Z1Z2 may be O, NOR1; R1 = H, alkyl, (un) substituted aryl, (un)substituted aralkyl; R = alkyl, cycloalkyl, cycloalkylalkyl, (un) substituted aryl, (un) substituted aralkyl; Z = alkylene, alkenylene,

alkynylene; Y = (un)substituted heterocyclyl, (un)substituted amino; A = alkylene, alkenylene, alkynylene] are prepared A mixture of 3-[1-methylpyrrol-2-carboxamido]propionic acid (prepared by amidation of 1-methylpyrrole-2-carboxylic acid with β-alanine benzyl ester followed by hydrolysis) and 80% polyphosphoric acids was heated at 100° for 30 min to give 67% 1-methyl-6,7-dihydropyrrolo[2,3c]azepine-4,8(1H,5H)-dione, which was further converted into the title compound III. III at 10-7 M showed 80.5% contraction of norepinephrine-induced contraction in marmot arteries.

IT150159-32-3P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as cardiovascular agent)

RN 150159-32-3 CA CN

Pyrrolo[2,3-c]azepine-4,8(1H,5H)-dione, 7-[3-[4-[(4-fluorophenyl)thio]-1piperidinyl]propyl]-6,7-dihydro-1-methyl- (9CI) (CA INDEX NAME)

$$S \longrightarrow N \longrightarrow (CH_2)_3 \longrightarrow N \longrightarrow N$$

L11 ANSWER 49 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

119:72495 CA

TITLE:

Preparation of N-(piperidinoalkyl)cycloalkanedicarboxy imide derivatives and analogs as drugs for preventing

reperfusion disorder of heart muscle

INVENTOR(S):

Takeo, Satoshi; Antoku, Fujio

PATENT ASSIGNEE(S): SOURCE:

Sumitomo Pharmaceuticals Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04308569	A	19921030	JP 1991-99409	19910403 <
JP 3219281	B2	20011015		
PRIORITY APPLN. INFO.: OTHER SOURCE(S):	МАРРАТ	119:72495	JP 1991-99409	19910403
CT		110.72100		

$$Q = \begin{bmatrix} R^1 \\ L \\ R^2 \end{bmatrix}$$

$$Q = \begin{bmatrix} R^1 \\ L \\ R^2 \end{bmatrix}$$

$$Q = \begin{bmatrix} R^1 \\ R^2 \\ R^3 \end{bmatrix}$$

$$Q = \begin{bmatrix} R^1 \\ R^3 \\ R^4 \end{bmatrix}$$

$$Q^2 = \begin{bmatrix} R^9 \\ R^1 \end{bmatrix}$$

AB The title compds. [I; A = SO, SO2; when A = CO, B = Q - Q2, CH2CR11R12; when A = SO2, B = 1,2-phenylene; R1, R2 = H, or one of R1 and R2 = H and the other = HO, alkyl, alkanoyloxy, or R1R2 = O; E = CH2, CH2CH2; L = single or double bond; when Z = bond, E = CH2, CH2CH2, or O and when Z = bondCH2, E = CH2 or CH2CH2; R3 - R8 = H, alkyl; R9 - R12 = alkyl; n = 0, 1; W = (un)substituted lower alkylene, alkenylene, alkynylene; G = (un) substituted NH or CH2] and II [M = Q, Q1; T1 = cyano, HO, alkanoyloxy, acyl, H, alkoxy, CO2H, its ester or amide; T2 = (un)substituted Ph or cyclic amino], useful as protectants for ischemic heart muscle, e.g. for preventing heart failure and arrhythmia in reperfusion disorder after treating myocardial infarction, are prepared Thus, a mixture of 1.5 g N-(4-bromobutyl)cyclohexane-1,2-dicarboxyimide, 1 g 4-(p-chlorophenyl)-4hydroxypiperidine, 719 mg K2CO3, and 15 mL DMF were stirred at 100-110° for 5 h to give after silica gel chromatog. 69.3% N-[4-[4-(4-chlorophenyl)-4-hydroxypiperidino]butyl]cyclohexane-1,2dicarboxyimide-HCl. A total of 16 title compds. were prepared and 7 N-(piperidinoalkyl)cyclohexanedicarboxyimide derivs. at 100 μg/min in vitro restored the myocardial contractility of ischemic rat hearts by 17-48%.

IT 116364-10-4P

RN

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as protectant for myocardial reperfusion disorder) 116364-10-4 CA

CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[4-[(4-fluorophenyl)thio]-1-piperidinyl]butyl]hexahydro-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

INVENTOR(S):

L11 ANSWER 50 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 119:8684 CA

TITLE: Preparation of N-(aminoalkyl)piperidines, their

enantiomers, and pharmaceutical compositions as

neurokinin receptor antagonists

Emonds-Alt, Xavier; Martinez, Serge; Proietto,

Vincenzo; Van Broeck, Didier

PATENT ASSIGNEE(S): Elf Sanofi SA, Fr.

SOURCE: Eur. Pat. Appl., 47 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

		DATE	APPLICATION NO.	
ED 515240		10021125	EP 1992-401237	10020430
EP 515240 EP 515240	AT.	19971125	EP 1992-401237	19920430 <
			CD CD TT IT III NI	. סיי
			GB, GR, IT, LI, LU, NL FR 1991-5486	
FR 2676054 FR 2676054	AI D1			19910303 <
FR 26/6054	D.T.	19930903 19921104	NO 1992-1733	10020430
NO 9201733 NO 178572 NO 178572	A	19921104	NO 1992-1733	19920430 <
NO 178572	В	19960115		
NO 178572	C.	19960424	ER 1000 23EC	10000130
ZA 9203176	A	19930428 19940502	ZA 1992-3176	
			HU 1992-1459	19920430 <
	В	19971128	· DV 1000 F011510	10000430
RU 2089547	<u>C</u> 1	19970910	·	
AT 158574		19971015		
CZ 282919	В6		CZ 1992-1328	
ES 2109987			ES 1992-401237	
FI 103041	В	19990415	FI 1992-1950	19920430 <
FI 103041		19990415		
CA 2067924	A1	19921104		19920501 <
CA 2067924	С	20040330 19921105 19950309		
AU 9215918	A	19921105	AU 1992-15918	19920501 <
AU 657321	B2	19950309		
IL 101762	A	19961016	IL 1992-101762	19920501 <
BR 9201655	A	19921215	BR 1992-1655	
US 5411971	A	19950502	US 1992-877734	19920504 <
JP 05140103	A	19930608	JP 1992-113818	19920506 <
JP 3108719	B2	20001113		
US 5606065	Α	19970225	US 1995-410292	19950324 <
PRIORITY APPLN. INFO.:			FR 1991-5486	
			US 1992-877734	A3 19920504
OMITTED COLUMNIE (C)	MADDAM	110 0604		

OTHER SOURCE(S): MARPAT 119:8684

GI

AΒ The preparation of title compds. I [m = 2, 3; Ar = (un)substituted Ph, thienyl, pyridyl, (un) substituted imidazolyl; Ar' = (un) substituted Ph, thienyl, (un) substituted imidazolyl or benzothienyl, (un) substituted naphthyl, biphenyl, (un) substituted indolyl; X = O, S, SO, SO2, NH, NCO-Alk, N-Alk $(Alk = C1-3 \ alkyl)$, N-Alk1-NX1X2 $(Alk1 = C1-3 \ alkylene; X1, X2 = H, C1-3)$ alkyl; NX1X2 = pyrrolidino, piperidino, morpholino); Q = H, C1-4 alkyl, specified aminoalkyls; R = H, Me, (CH2)nL $\{n = 2-6, L = H, amino, CO, amino, LO, a$ C(S)NH, C(O)NH; T = CO, Z = M or OM; T = C(S)NH, C(O)NH, Z = M, where M = C(S)NHH, linear or branched C1-6 alkyl, α -hydroxybenzyl, α -alkylbenzyl, specified phenylalkyls, pyridylalkyls, naphthylalkyls, pyridylthioalkyls, styryl, specified imidazolylthioalkyls, 1-oxo-3-phenylindan-2-yl, mono- or polysubstituted aromatic or heteroarom.], their salts, isomers, and quaternary ammonium salts are claimed with preparative examples given. The compds. are of interest as neurokinin receptor antagonists. Title compound II antagonized neurokinin A with a Ki = 5.5 nM.

II

IT 101798-65-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and condensation of, with (aroylamino)mesyloxybutane, in preparation

of neurokinin receptor antagonist)

RN 101798-65-6 CA

CN Piperidine, 4-(phenylthio)- (9CI) (CA INDEX NAME)



L11 ANSWER 51 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

117:103575 CA

TITLE:

3-Substituted-1,2-benzisoxazoles: novel antipsychotic

agents

AUTHOR (S):

Davis, Larry; Effland, Richard C.; Klein, Joseph T.; Dunn, Robert W.; Geyer, Harry M., III; Petko, Wayne m.

CORPORATE SOURCE:

Chem. Res. Dep., Hoechst-Roussel Pharm. Inc.,

Sommerville, NJ, 08876, USA

SOURCE:

Drug Design and Discovery (1992), 8(3),

225-40

CODEN: DDDIEV; ISSN: 1055-9612

DOCUMENT TYPE:

Journal

LANGUAGE:

English

I

GI

$$(CH_2)_3N N N OMe$$

AB A series of 3-substituted-6-fluoro-1,2-benzisoxazoles was synthesized and evaluated for potential antipsychotic activity. Many of the compds. displayed potent antipsychotic-like activity in the apomorphine induced climbing in mice (CMA) or spiroperidol binding assays, and HRP 392 (I) was selected for more detailed antipsychotic evaluation in a battery of preclin. assays. I is a potential antipsychotic drug with less propensity for EPS than some standard neuroleptics in monkeys. The compound was advanced for toxicol. evaluation.

IT 88793-02-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

.(preparation and antipsychotic activity of)

RN 88793-02-6 CA CN 1,2-Benzisoxazo

1,2-Benzisoxazole, 6-fluoro-3-[3-[4-(phenylthio)-1-piperidinyl]propyl]-, monohydrochloride (9CI) (CA INDEX NAME)

F
$$O$$
 N $(CH2)3 $-N$ $SPh$$

HC1

L11 ANSWER 52 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

117:69731 CA

TITLE:

Preparation of 4,5,6,7-tetrahydroindole derivatives and their thia or oxa analogs and serotoninergic or dopaminergic receptor antagonists containing them Imuda, Junichi; Kihara, Noriaki; Mizuchi, Akira;

INVENTOR(S):

Horigome, Kazutoshi; Awaya, Akira

PATENT ASSIGNEE(S):

Mitsui Sekiyu Kagaku Kogyo K. K., Japan; Mitsui

Seiyaku K. K.

SOURCE:

Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04054179	Α	19920221	JP 1990-162677	19900622 <
JP 2983257	B2	19991129		
PRIORITY APPLN. INFO.:			JP 1990-162677	19900622
OTHER SOURCE(S):	MARPAT	117:69731		
GI				

- The title derivs. I (one of R1 and R2 = Q and the other = H, lower alkyl, AB halo; R3 = H, lower alkyl, halo., NO2, CO2H, lower alkylcarbonyl, lower alkoxycarbonyl; R2 and R3 may be bonded to form condensed 6-membered hydrocabon ring; R4 = H, lower alkyl; X = Q1, CHCO, CHS; Y = S, O, NR5; R5 = H, lower alkyl, lower alkylsulfonyl, arylsulfonyl) and pharmaceutical compds. containing I as active ingredients are claimed. I show antagonistic action against serotoninergic receptors and dopaminergic receptors and are useful as psychotropic agents and antihypertensives. A mixture of 4,5,6,7-tetrahydro-2-methyl-3-ethyl-4-oxoindole, 4-[(4-fluorobenzene)thio]-1-piperidine hydrochloride, paraformaldehyde, and EtOH was refluxed for 40 h to give 60% I (R1 = Q, R2 = Et, R3 = Me, R4 = H, X = CHS, Y = NH) (II). A tablet containing I 10, corn starch 55, crystalline cellulose 35, poly(vinylpyrrolidone) 10% aqueous solution 5, CM-cellulose Ca 10, Mg stearate
- 4, and talc 1 mg was prepared II at 0.1 mL/10 g (as 1 mg/mL solution) i.p. inhibited 24% quipazine-induced head twitch and 33% apomorphine-induced climbing in mice.
- IT 142407-78-1P
 - RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as serotoninergic receptor and dopaminergic receptor antagonist)
- 142407-78-1 CA RN
- 4H-Indol-4-one, 3-ethyl-5-[[4-[(4-fluorophenyl)thio]-1-piperidinyl]methyl]-CN 1,5,6,7-tetrahydro-2-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

L11 ANSWER 53 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

117:48598 CA

TITLE:

Preparation of heterocyclic compounds as psychotropic

agents

Patent

1

Japanese

INVENTOR(S):

Imuda, Junichi; Furuya, Yoshiro; Ishitoku, Takeshi; Mizuchi, Akira; Horigome, Kazutoshi; Awaya, Akira

PATENT ASSIGNEE(S):

Mitsui Sekiyu Kagaku Kogyo K. K., Japan; Mitsui

Seiyaku Kogyo K. K.

SOURCE:

GI

Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04054181 JP 3036789	A B2	19920221	JP 1990-162676	19900622 <
PRIORITY APPLN. INFO.: OTHER SOURCE(S):		117:48598	JP 1990-162676	19900622

AB Heterocyclic compds. are prepared as serotoninergic and dopaminergic antagonists. Refluxing a mixture of pyrimidine derivative I, piperidine salt

II, and K2CO2 in MeCOCH2CHMe2 gave 80% III, which showed 39% inhibition of dopamineric activity at 1 mg/mL. Also prepared and tested were 16 addnl. heterocyclic compds. Tablet, capsule, and injection formulations were given.

66496-80-8P IT

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of psychotropic agent)

RN66496-80-8 CA

Piperidine, 4-[(4-fluorophenyl)thio]-1-methyl- (9CI) (CA INDEX NAME) CN

CA COPYRIGHT 2007 ACS on STN L11 ANSWER 54 OF 66

ACCESSION NUMBER:

116:151794 CA

TITLE:

Preparation of [[[(carboximidomethyl)cycloalkyl]methyl

]azinyl]arenes as antipsychotics

INVENTOR(S):

Saji, Ikutaro; Muto, Masayuki; Tanno, Norihiko;

Yoshigi, Mayumi

PATENT ASSIGNEE(S):

Sumitomo Pharmaceuticals Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 67 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KI	ND DATE	APPLICATION NO.	DATÉ
EP 464846	A	19920108	EP 1991-111223	19910705 <
EP 464846	В	1 19980422		
R: AT	, BE, CH, DE	, DK, ES, FR,	GB, GR, IT, LI, LU, NL	, SE
JP 0501744	Α 0	19930126	JP 1991-183640	19910627 <
JP 2800953	В	19980921		
CA 2046429	A	1 19920107	CA 1991-2046429	19910705 <
CA 2046429	С	20030916		
AT 165359	T	19980515	AT 1991-111223	19910705 <
ES 2115599	T	3 19980701	ES 1991-111223	19910705 <
US 5532372	A	19960702	US 1993-113320	19930830 <
US 5780632	A	19980714	US 1996-634738	19960418 <
PRIORITY APPLN.	INFO.:		JP 1990-180271	A 19900706
	•		US 1991-726172	B1 19910705
			US 1993-113320	A3 19930830

OTHER SOURCE(S):

CASREACT 116:151794; MARPAT 116:151794

GI

AB Title compds. [I; R1-R4 = H, alkyl; R1R2 = nonarom. hydrocarbylene; R1R3 = (aromatic) (substituted) (bridged) hydrocarbylene; X = C0, S02; n = 0, 1; A = (substituted) (bridged) nonarom. hydrocarbon ring; p, q = 0-2; X1 = (hetero)aryl, PhCO, PhO, PhS, and G = N, CH, COH; or X1 = biphenylmethylidene, G = C] were prepared Thus, spiro derivative II (preparation

III

from trans-1,2-cyclohexanecarboxylic anhydride given) was refluxed with bicyclo[2.2.1]heptane-2-exo-3-exo-dicarboximide, K2CO3, and dibenzo-18-crown-6 in PhMe to give title compound III. III showed ED50 of 10.3 mg/kg orally for suppression of apomorphine-induced climbing behavior in mice.

IT 139505-64-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as antipsychotic)

RN 139505-64-9 CA

CN 1H-Isoindole-1,3(2H)-dione, 2-[[(1R,2R)-2-[[4-[(4-fluorophenyl)thio]-1-piperidinyl]methyl]cyclohexyl]methyl]hexahydro-, monohydrochloride, (3aR,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L11 ANSWER 55 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 115:

115:232223 CA

TITLE:

Preparation of pyrroloazepines as cardiovascular

agents

INVENTOR(S):

Mizuno, Akira; Cho, Hidetsura; Hamaguchi, Mikiko;

Tatsuoka, Toshio; Takafumi, Ishihara

PATENT ASSIGNEE(S):

SOURCE:

Suntory, Ltd., Japan

Eur. Pat. Appl., 59 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 441349 EP 441349	A1 B1	19910814 19960103	EP 1991-101616	19910206 <
R: AT, BE, CH,	DE, DK	, ES, FR, GE	B, GR, IT, LI, LU, NL	J, SE
JP 05097856	A	19930420	JP 1991-27739	19910130 <
JP 3198117	B2	20010813		
AU 9170806	A	19910808	AU 1991-70806	19910206 <
AU 642960	B2	19931104		
CA 2035749	A1	19910808	CA 1991-2035749	19910206 <
CA 2035749	С	20011023		
AT 132497	T	19960115	AT 1991-101616	19910206 <
ES 2084719	T3	19960516	ES 1991-101616	19910206 <
KR 229403	B1	19991101	KR 1991-2025	19910206 <
US 5206239	A	19930427	US 1991-651778	19910207 <
US 5391731	Α	19950221	US 1992-987703	19921209 <
US 5416082	Α	19950516	US 1994-195019	19940214 <
PRIORITY APPLN. INFO.:			JP 1990-26137	A 19900207
			JP 1991-27739	A 19910130
			US 1991-651778	A3 19910207
			US 1992-987703	A1 19921209
OTHER SOURCE(S):	MARPAT	115:232223		

Page 84

GI

AB Title compds. I (R = H, C1-6 alkyl, C7-10 aralkyl; A = C2-10 alkylene, alkenylene, alkynylene, Y = substituted piperidinyl, pyrrolidinyl; Z = O, R1ON, R1 = H, alkyl, aryl, aralkyl, R5CONO; R5 = H, alkyl, aryl, aralkyl) having strong anti-α1 and antiserotonin actions and useful as therapeutics for circulatory diseases, are prepared 1-(4-Chlorobutyl)-4-(hydroxyimino-7-methyl-6,7-dihydropyrrolo[2,3-c]azepine-8(1H,5H)-one [preparation starting from pyrrole-2-carboxylic acid and Et 3-(methylamino)propionate given], 4-(4-fluorobenzoyl)piperidine.HCl, and K2CO3 in DMF were stirred for 14 h at 80° to give I [R = Me, A = (CH2)4, Y = 4-(4-fluorobenzoyl)piperidino, Z = HON:] (II). II at 10-8 M reduced contraction of guinea pig aortal strips induced by norepinephrine to 44.7% of controls.

IT 136976-20-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, for treatment of circulatory diseases)

RN 136976-20-0 CA

CN Pyrrolo[2,3-c]azepine-4,8(1H,5H)-dione, 1-[4-[4-[(4-fluorophenyl)thio]-1-piperidinyl]butyl]-6,7-dihydro-7-methyl-, 4-oxime (9CI) (CA INDEX NAME)

L11 ANSWER 56 OF 66 CA COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 115:8584 CA

TITLE: Preparation of 2-piperidino-1-alkanol derivatives as

antiischemic agents

INVENTOR(S): Chenard, Bertrand Leo

PATENT ASSIGNEE(S): Pfizer Inc., USA

SOURCE: Eur. Pat. Appl., 48 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
	A2		EP 1990-304975	•		<
			GB, GR, IT, LI, LU,			
SK 279476		19981104				
CZ 284342	В6	19981014			19900511	
CA 2016860	С	19980728	CA 1990-2016860		19900515	<
US 5185343	Α	19930209	US 1991-784446		19911023	<
FI 113645	B1 ·	20040531	FI 1991-5403		19911115	
US 5272160	Α	19931221	US 1992-932844		19920820	<
US 5338754	A	19940816	US 1993-96913		19930723	<
US 5391742	A	19950221	US 1994-228466		19940415	<
US 5710168	A	19980120			19941109	<
US 5527912	A	19960618	US 1995-411030		19950327	<
PRIORITY APPLN. INFO.:		•	WO 1989-US2176	Α	19890517	
			WO 1990-US292	Α	19900116	
			US 1991-784446 '	A3	19911023	
			US 1992-932844	A3	19920820	
			US 1993-96913	A3	19930723	
			US 1994-228466		19940415	
			US 1994-336639	A3	19941109	
OTHER SOURCE(S):	MARPAT	115:8584				

The title compds. (I; R = H, alkyl, alkenyl, alkynyl; X = H, OH, aryl; Y = H, OH; Y1 = aryl, aralkyl, arylthio, aryloxy, YY1 = arylmethylene, aralkylmethylene; Q = S, CH:CH), useful as antiischemic agents in treating strokes, Alzheimer's disease, Huntington's disease, and Parkinson's disease (no data), are prepared A mixture of piperidine derivative II, p-(Me2CH) 3SiOC6H4COCHBrMe, and Et3N in EtOH was refluxed to give 23% propiophenone III, which was reduced with LiAlH4 to give 89% mixture of (1R*,2S*) - and (1S*,2S*)-I [R = Me, X = 4-(Me2CH) 3SiO, YY1 = PhCH, Q =

CH:CH] (IV). Hydrolysis of IV with Bu4N+ F- in THF at room temperature gave

the

mixture phenolic alc. (1S*,2S*) - and (1R*,2S*) -I (R = Me, X = 4-HO, YY1 = PhCH, Q = CH:CH). Also prepared were 75 addnl. I and intermediates.

IT 134136-69-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of antiischemic agent)

RN 134136-69-9 CA

CN 1-Propanone, 1-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]phenyl]-2-[4-(phenylthio)-1-piperidinyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 57 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

114:6267 CA

TITLE:

Pyridonecarboxylic acid antibacterial agents. XV. Synthesis of 7-thio-substituted 4-oxoquinoline-3-

carboxylic acids with antibacterial activity

AUTHOR (S):

Nishimura, Yoshiro; Hirose, Tohru; Okada, Hidetsugu;

Shibamori, Kohichiro; Nakano, Junji; Matsumoto,

Junichi

CORPORATE SOURCE:

Res. Lab., Dainippon Pharm. Co., Ltd., Suita, 564,

Japan

SOURCE:

Chemical & Pharmaceutical Bulletin (1990),

38(8), 2190-6

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE:

LANGUAGE:

Journal English

Ι

OTHER SOURCE(S):

CASREACT 114:6267

GI

AB A series of C-7 thio-substituted 1-cyclopropyl-1,4-dihydro-4-oxoquinoline-3-carboxylic acids, e.g., I (R = CH2CH2NH2, Me, Et, PhCH2, CH2CH2OH, aryl heteroaryl, R1 = H, F, NH2, OH) were prepared and tested for their antibacterial activity. Structure-activity relationships associated with the C-5 and C-7 substituents were discussed. Among the C-7 substituents including alkylthio, arylthio, heteroarylthio, and cyclic aminothio

groups, a 2-aminoethylthio group was the best for enhancing in vitro antibacterial activity. The C-5 variants increased activity in the order OH < F < H < NH2. Of compds. prepared I (R = CH2CH2NH2, R1 = NH2) was the most active.

IT 124278-06-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antibacterial activity of)

RN 124278-06-4 CA

CN 3-Quinolinecarboxylic acid, 1-cyclopropyl-6,8-difluoro-1,4-dihydro-4-oxo-7-(4-piperidinylthio) - (9CI) (CA INDEX NAME)

L11 ANSWER 58 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

112:178707 CA

TITLE:

Preparation of quinoline-3-carboxylic acid derivatives and their pharmaceutical compositions as bactericides Yasuo, Itoh; Hideo, Kato; Eiichi, Koshinaka; Nobuo,

INVENTOR(S):

Ogawa; Kazuya, Mitani; Noriyuki, Yagi; Toshihiko,

Yoshida; Tomio, Suzuki

PATENT ASSIGNEE(S):

Hokuriku Pharmaceutical Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 30 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 339406	A1	19891102	EP 1989-106778		19890415 <
R: AT, BE, CH,	DE, ES	, FR, GB,	IT, LI, NL, SE		•
JP 02223559	Α	19900905	JP 1989-11987		19890123 <
DK 8901905	A	19891020	DK 1989-1905		19890419 <
PRIORITY APPLN. INFO.:			JP 1988-94679	A	19880419
			JP 1988-150340	Α	19880620
			JP 1988-285640	Α	19881114
			JP 1989-11987	Α	19890123

OTHER SOURCE(S): MARPAT 112:178707

GI

$$R^{1}$$
 O $CO_{2}H$ $R^{5}R^{6}NCR^{3}R^{4}$ (CH_{2}) $CHR^{2}A$ $C1$

AB The title compds. (I; R1 = H, NH2; R2 = H, alkyl, R2R4 = C1-4 alkylene; R3, R4 = H, alkyl, R3R4 = C2-6 alkylene; R5, R6 = H, alkyl, R2R5 = C2-4 alkylene, R3R5N, R5R6N = 5- to 7-membered heterocycle; A = O, S; n = 0-3) and their pharmacol. acceptable salts were prepared NaH (60%) was added to a solution of Me2NCH2CH2OH in DMF with stirring at room temperature, difluoro compound II was added under cooling, and the mixture was stirred at room temperature

to give I (R1-R4 = H, R5 = R6 = Me, A = O, n = 0). Addnl. 55 I were prepared, of which some showed MIC of 0.20-0.39 μ g/mL against Staphylococcus aureus. Tablet, capsule, granule, injection, and suppository formulations were given.

IT 126496-22-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as bactericide)

RN 126496-22-8 CA

CN 3-Quinolinecarboxylic acid, 8-chloro-1-cyclopropyl-6-fluoro-1,4-dihydro-7-[(1-methyl-4-piperidinyl)thio]-4-oxo-(9CI) (CA INDEX NAME)

L11 ANSWER 59 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

112:20980 CA

TITLE:

Oxonaphthyridine- and oxoquinoline-3-carboxylic acid

as microbicides

INVENTOR(S):

Hirose, Tooru; Nishimura, Yoshio; Okada, Hidetsugu; Nakano, Junji; Matsumoto, Junichi; Nakamura, Shinichi

PATENT ASSIGNEE(S):

Dainippon Pharmaceutical Co., Ltd., Japan

SOURCE:

GI

Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

Ι

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
				-		
JP 01156961	A	19890620	JP 1988-105604		19880428	<
JP 2640967	B2	19970813				
PRIORITY APPLN. INFO.	:	•	JP 1987-108528	A1	19870430	
			JP 1987-230450	A1	19870914	
OTHER SOURCE(S):	MARPAT	112:20980				

Title compds. I [X = N, CR3; R3 = H, Cl; Y1 = H, halo, OH, (substituted) AB NH2; Y2 = H, halo; R1 = alkyl, haloalkyl, alkenyl, cycloalkyl, (substituted) Ph; R2 = H, (mono- or di-substituted) alkyl, alkenyl, Ph, or heterocyclyl; n = 0-2; excluding a combination of X = CH, Y1 = H, Y2 = F, R1 = Et, R2 = H2N(CH2)2, and n = 0] or their salts or esters are prepared as medical and agrochem. microbicides and food preservatives. A mixture of a quinoline II (R4 = F), H2N(CH2)2SH, and Et3N in MeCN was refluxed to give The latter showed a MIC of 0.39 µg/mL against II [R4 = H2N(CH2)2S]. Staphylococcus aureus.

IT 124256-45-7P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as microbicide)

RN124256-45-7 CA

3-Quinolinecarboxylic acid, 1-cyclopropyl-6,8-difluoro-1,4-dihydro-4-oxo-7-CN [[1-(triphenylmethyl)-4-piperidinyl]thio]- (9CI) (CA INDEX NAME)

L11 ANSWER 60 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

111:133993 CA

TITLE:

Preparation of piperidines as antiarrhythmic agents

INVENTOR(S):

Oinuma, Hitoshi; Yamanaka, Motosuke; Miyake,

Kazutoshi; Hoshiko, Tomonori; Minami, Norio; Shoji,

Tadao; Daiku, Yoshiharu; Sawada, Kohei; Nomoto,

Kenichi

PATENT ASSIGNEE(S):

SOURCE:

Eisai Co., Ltd., Japan Eur. Pat. Appl., 56 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 304888			EP·1988-113786		
EP 304888	B1	19921111			
R: AT, BE, CH	, DE, ES	FR, GB,	GR, IT, LI, LU, NL, S	E	
JP 01052756	Α.	19890228	JP 1987-209726		19870824 <
JP 01052756 JP 2637989	B2	19970806			•
JP 01052752	A '	19890228	JP 1987-209727		19870824 <
JP 08019083	В	19960228			
JP 01052717	A	19890228	JP 1987-209728		19870824 <
JP 2584454	B2	19970226			
US 4977165	A	19901211	US 1988-234468		19880819 <
NO 8803750	A	19890227	NO 1988-3750		19880822 <
DK 8804704	A	19890225	DK 1988-4704		19880823 <
HU 48587	A2	19890628	HU 1988-4430		19880823 <
HU 207043	В	19930301			
CA 1263658	A1	19891205	CA 1988-575436		19880823 <
AT 82263	T	19921115	AT 1988-113786		19880824 <
ES 2045044	T3	19940116	ES 1988-113786		19880824 <
US 5082850	A	19920121	US 1990-571313		19900822 <
US 5162347	A	19921110	US 1991-703208		19910520 <
US 5246946	A	19930921	US 1992-930727		19920814 <
PRIORITY APPLN. INFO.:			JP 1987-209726	Α	19870824
			JP 1987-209727	Α	19870824
			JP 1987-209728	Α	19870824
			US 1988-234468	A3	19880819
			EP 1988-113786	Α	19880824
			US 1990-571313	A 3	19900822
			US 1991-703208	A3	19910520

OTHER SOURCE(S):

MARPAT 111:133993

GΙ

$$Q^{1} = -X - NR^{2}$$

$$Q^{2} = -CH(CH_{2}OH)N - CO - R^{2}$$

$$MeSO_{2}NH - SO_{k} - NCH_{2}CH_{2} - NCH_{2}CH_$$

AB R1SO2NHC6H4W-4 [I; R1 = alkyl; W = X1(CH2)pNR12Y1, Q1, Q2; R2 = H, (CH2)nY; R12 = H, alkyl; R22 = H, OH, halo, alkyl, alkoxy; X = S, SO, SO2; X1 = CO, CH(OH); Y = aryl, (un)substituted pyridyl; Y1 = (CH2)mA; A = (un) substituted aryl, pyridyl; NR12Y1 = (un) substituted heterocyclyl; m = 1, 2; n = 1-5; p = 1-4] were prepared N-Benzoyl-4-bromopiperidine (preparation given) was stirred 1.5 h at 90° with RSH [R = 4-(MeSO2NH)C6H4] (preparation given) in DMF containing K2CO3 and KI to give, after hydrolysis, RQ1.HCl (R as above, R2 = Bz, X = S) which was stirred 40 min at 85° with NaHCO3, followed by addition of KI and 2-(3-pyridyl)ethyl chloride-HCl and stirring 1.5 h at 85°, to give (phenylthio) (pyridylethyl) piperidine II (k = 0). The latter was stirred 1 h with NaIO4 in MeOH containing aqueous HCl to give II (k = 1) which gave 40% prolongation of action potential duration in isolated guinea pig myocardium at 10-5 M with no Vmax inhibition.

IT 122374-28-1P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of antiarrhythmic agents)

122374-28-1 CA RN

Piperidine, 1-benzoyl-4-[[4-[(methylsulfonyl)amino]phenyl]thio]- (9CI) CN (CA INDEX NAME)

L11 ANSWER 61 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

111:115198 CA

TITLE:

Preparation of pyrimidine derivatives for treatment of

neurological disorders

INVENTOR(S):

Awaya, Akira; Horikomi, Kazutoshi; Sasaki, Tadayuki; Kobayashi, Hisashi; Mizuchi, Akira; Nakano, Takuo; Tomino, Ikuo; Araki, Shintaro; Takesu, Mitsuyuki; et

al.

PATENT ASSIGNEE(S):

Mitsui Pharmaceuticals, Inc., Japan; Mitsui

Petrochemical Industries, Ltd.

SOURCE:

Eur. Pat. Appl., 73 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

PA	TENT NO.			KIND	DATE	APPLICATION NO.		DATE	
EF	305184			A1	19890301	EP 1988-307893		19880825	< - -
E	305184			B1	19940427				
	R: AT,	BE,	CH,	DE, ES	, FR, GB,	GR, IT, LI, LU, NL,	SE		
JF	01139572	2		A	19890601	JP 1988-208190		19880824	<
JF	2628707			B2 ·	19970709				
CA	1336904			С	19950905	CA 1988-575504		19880824	<
WC	8901938			A1	19890309	WO 1988-JP845		19880825	<
	W: HU,	KR,	US						
HU	57211			A2	19911128	HU 1988-5376		19880825	<
HU	205931			В	19920728	•			
ΑT	104980			T	19940515	AT 1988-307893		19880825	<
CN	1032004			A	19890329	CN 1988-106967		19880826	<
CN	1025617			В	19940810				
CN	1079742			Α	19931222	CN 1993-103112		19930317	< - -
PRIORIT	Y APPLN.	INFO.	. :			JP 1987-210170	Α	19870826	
			•	•		EP 1988-307893	Α	19880825	
						CN 1988-106967	Α	19880826	
OTHER C	OTTOCE (C)			маррат	111.11510	18			

OTHER SOURCE(S): MARPAT 111:115198

AB Title compds. I {X = R1R2N [R1 = H, alkyl; R2 = PhCH2CH2, cyclohexyl, PhCH2, etc.; R1R2N = heterocyclyl (nine structures are given)], R4S (R4 = alkyl); Y = (mono- or dialkyl-substituted) amino; Z = alkoxycarbonylmethyl, alkoxycarbonyl; YZ = NR5COCH2 [R5 = (alkoxy-substituted)alkyl], CH2NR6COCH2 (R6 = alkyl)} are prepared Treatment of I (X = Me2CHNH, Y = OH, Z = CH2CO2Et) with POCl3 gave 74% I (Y = Cl), which in EtOH was autoclaved with 40% MeNH2/MeOH at 120° to afford 35% I (X = Me2CHNH, YZ = NMeCOCH2). A HCl salt of the latter at 30 mM showed 30.5 ± 0.3% (number of cells having neurites with a length at least two times the diameter of cells/total number of cells) in mouse neuro-2a cells, vs. 28.5 ± 3.0% for 10 mM isaxonine and 2.5 ± 0.7% for control. A tablet was formulated containing I 10, corn starch 55, crystalline cellulose 35, polyvinyl pyrrolidone (10% aqueous solution) 5, CM-cellulose Ca

Mg stearate 4, and talc 1 mg.

IT 122112-89-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, for treatment of central and peripheral nerve disorders)

RN 122112-89-4 CA

CN 6H-Pyrrolo[2,3-d]pyrimidin-6-one, 5,7-dihydro-7-methyl-2-[4-(phenylthio)-1-piperidinyl]- (9CI) (CA INDEX NAME)

Page 93

L11 ANSWER 62 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

109:128836 CA

TITLE:

Preparation of N-(N-piperidylalkyl)imides as

antipsychotic agents

INVENTOR(S):

Antoku, Fujio; Yoshigi, Mayumi; Saji, Ikutaro; Kojima,

Atsuyuki; Ishizumi, Kikuo

PATENT ASSIGNEE(S):

Sumitomo Pharmaceuticals Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 57 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	ATENT NO.		DATE	APPLICATION NO.		DATE	
-					-		
E	P 261688	A1	19880330	EP 1987-114026		19870925	<
E	P 261688	B1	19920325				
	R: AT, BE, CH,	DE, ES	, FR, GB,	GR, IT, LI, LU, NL, SE			
A	U 877.8860	Α	19880331	AU 1987-78860		19870922	<
Α	U 593194	B2	19900201				
J	P 63183576	Α	19880728	JP 1987-238061		19870922	<
D	K 8705065	A	19880327	DK 1987-5065		19870925	<
U	S 4812461	A	19890314	US 1987-100824		19870925	<
A	Т 74132	T	19920415	AT 1987-114026		19870925	<
E	S 2031865	Т3	19930101	ES 1987-114026		19870925	<
C	A 1329935	С	19940531	CA 1987-547842		19870925	<
J	P 63132887	A	19880604	JP 1987-271410		19871027	<
U	S 4948799	A	19900814	US 1989-293440		19890104	<
A	U 8945407	A	19900308	AU 1989-45407		19891121	<
A	U 617902	B2	19911205				
PRIORI	TY APPLN. INFO.:			JP 1986-228795	A	19860926	
				EP 1987-114026	Α	19870925	
				US 1987-100824	А3	19870925	
ОТИБЬ	SUIDCE (S) ·	CACDEAG	חר וחם - וחר	936. MADDAT 109.129936			

OTHER SOURCE(S):

CASREACT 109:128836; MARPAT 109:128836

AB The title compds. [I; A = CO, SO; B = alkylene, 1,2-cycloalkylene,

cycloalkylidine, 1,2-phenylene; G = benzisothiazolyl, ZC6H4Y; W = alkylene, alkenylene, alkynylene; Y = 0, CO, CH2, S, SO, SO2, CH(OR), C:NOH; R = H, alkyl, alkanoyl; Z = H, halo, alkyl, alkoxy] were prepared Bicyclo[2.2.1]heptane-2,3-dicarboximide and (BrCH2CH2)2 were refluxed 5 h in Me2CO containing K2CO3 and the product heated 3 h with 4-(4fluorobenzoyl)piperidine (preparation given) in DMF containing Na2CO3 to give

II (R1R2 = CH2, R3 = R4 = H, G = 4-FC6H4CO) which had ED50 of 0.12 and 25-50 mg/kg s.c. and orally, resp., for anticlimbing and catalepsy inducing activity, resp., in mice.

IT 116364-10-4P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as antipsychotic agent)

116364-10-4 CA RN

1H-Isoindole-1,3(2H)-dione, 2-[4-[4-[(4-fluorophenyl)thio]-1-CN piperidinyl]butyl]hexahydro-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

L11 ANSWER 63 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

105:226390 CA

TITLE: 1-[4-(4-Quinolinylamino)benzoyl]piperidines and their

hypertensive use

INVENTOR(S): Ueda, Ikuo; Matsuo, Masaaki; Taniguchi, Kiyoshi;

Ogahara, Takatomo

PATENT ASSIGNEE(S):

Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE:

Eur. Pat. Appl., 54 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	rent no.			KINI	D DATE	APPLICATION NO.	DATE
EP	191603			A2	19860820	EP 1986-300808	19860206 <
EΡ	191603			A3	19870902		
	R: AT,	BE,	CH,	DE,	FR, GB, IT,	LI, LU, NL, SE	
ZA	8600485			Α	19860924	ZA 1986-485	19860122 <
AU	8652707			. A	19860814	AU 1986-52707	19860124 <
US	4735952			Α	19880405	US 1986-821974	19860124 <
FI	8600381			Α	19860812	FI 1986-381	19860128 <
JP	61183283			Α	19860815	JP 1986-24698	19860206 <
CN	86100964			Α	19861008	CN 1986-100964	19860208 <
DK	8600643			Α	19860812	DK 1986-643	19860210 <
NO	8600459			Α	19860812	NO 1986-459	19860210 <
HU	40431			A2	19861228	HU 1986-545	19860210 <
HU	195804			В	19880728		

ES 551800 19880101 ES 1986-551800 19860210 <--**A1** SU 1986-4024094 19890107 SU 1450740 Α3 19860210 <--19880301 ES 557679 ES 1987-557679 19870817 <--Α1 PRIORITY APPLN. INFO.: GB 1985-3416 19850211 GB 1985-17675 19850712 Α

OTHER SOURCE(S):

CASREACT 105:226390; MARPAT 105:226390

GI

$$R^{1}$$
 R^{2}
 R^{2}
 R^{2}
 R^{2}
 R^{3}
 R^{2}
 R^{2

AB Title compds. [I; R1 = H, trihalomethyl; R2 = H, protected CO2H; R3 = (halo-substituted) aryl, heterocyclyl; X = S, S(O), S(O)2, O, NH, (hydroxy-substituted) alkylene] are prepared as hypertensives. Thus, 4-[(2-fluorophenyl)sulfonyl]piperidine-HCl, prepared in 4 steps from 2-FC6H4SH and 4-chloro-1-methylpiperidine, reacted with 4-[[7-(trifluoromethyl)-4-quinolinyl]amino]benzoyl chloride-HCl to give title compound II, which was characterized by x-ray diffraction and DTA. At 10 mg/kg orally in hypertensive rats, II gave a 37% decrease in blood pressure.

IT 101798-76-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of)

RN 101798-76-9 CA

CN Piperidine, 4-[(4-fluorophenyl)thio]-, hydrochloride (9CI) (CA INDEX NAME)

HCl

L11 ANSWER 64 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

104:186309 CA

TITLE:

N-(Amino)alkyl-1-pyrrolidine, 1-piperidine and 1-homopiperidinecarboxamides (and thiocarboxamides) with sulphur linked substitution in the 2, 3 or

4-position

INVENTOR(S):

Shanklin, James Robert, Jr.

PATENT ASSIGNEE(S):

A. H. Robins Co., Inc., USA Eur. Pat. Appl., 147 pp.

SOURCE: CODEN: EPXXDW

DOCUMENT TYPE:

Patent

1

Ι

LANGUAGE:

GI

FAMILY ACC. NUM. COUNT:

English

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
EP 160436	A2	19851106	EP 1985-302526	-	19850410 <	
EP 160436	A 3	19880608				
R: AT, BE, CH,	DE, FR	, GB, IT, LI	, LU, NL, SE			
IL 74140	A	19880531	IL 1985-74140		19850123 <	
AU 8538116	A	19851017	AU 1985-38116		19850125 <	
AU 565886	B2	19871001				
JP 60228454	A	19851113	JP 1985-66382		19850329 <	
CA 1247093	A1	19881220	CA 1985-478539		19850409 <	
US 4593102	A	19860603	US 1985-750156		19850701 <	
US 4642348	A	19870210	US 1985-750180		19850701 <	
CA 1256866	A2	19890704	CA 1988-569484		19880614 <	
PRIORITY APPLN. INFO.:			US 1984-598582	Α	19840410	
			CA 1985-478539	A3	19850409	
OTHER SOURCE(S):	CASREA	CT 104:18630	9; MARPAT 104:186309			

 $(A^1)_p X (A^2)_d Q$ CYNRANR¹R²

The title compds. I (R, R1, R2 = H, C1-8 alkyl, Ph, C1-9 cycloalkyl, C7-14 AB phenylalkyl or NR1R2 = (un)substituted heterocyclyl; A, A1, A2 = C1-8 alkylene; Q = naphthyl, heterocyclyl, (un)substituted Ph; X = S, SO, SO2; Y = 0 or S; n = 0-2; d, p = 0 or 1) and their salts useful as antiarrhythmic agents were prepared Thus, 1,1'-carbonyldiimidazole and Et2NCH2CH2NH2 in THF were stirred at room temperature for 1 h, to this was added

3-(phenylsulfonyl)piperidine and refluxed for 22 h to give 58% N-[2-(diethylamino)ethyl]-3-(phenylsulfonyl)-1-piperidinecarboxamide which was converted to the oxalate sale (1:1) (II). In ouabain-induced arrhythmia in dogs, II was effective i.v. at 3-7 mg/kg. A tablet formulation contained I 10.0, cornstarch, kelacid, and keltose each 20.0, and Mg starch 1.3 mg/tablet.

IT 101798-71-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and conversion to hydrobromide salt)

RN101798-71-4 CA

CN Piperidine, 4-[(3,4-dichlorophenyl)thio]- (9CI) (CA INDEX NAME)

L11 ANSWER 65 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

100:85679 CA

TITLE:

6-Fluoro-3-[3-(1-heterocyclo)propyl]-1,2-

benzisoxazoles, pharmaceutical compositions thereof

and their use as medicaments

Davis, Larry; Klein, Joseph Thomas

PATENT ASSIGNEE(S): Hoechst-Roussel Pharmaceuticals, Inc., USA

SOURCE: Eur. Pat. Appl., 41 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	A2 A3	19831019 19841212		 19821023 <
	B1	19880511		
R: AT, BE, CH	, DE, FR	, GB, IT,	LI, LU, NL, SE	
US 4458075	A		US 1982-366245	19820409 <
IL 66868	A		IL 1982-66868	19820924 <
FI 8203434			FI 1982-3434	
AT 34172	T	19880515		
ZA 8207814	Α	19830831	ZA 1982-7814	19821026 <
ES 516828	A1	19830916		
DK 8204745	A	19831010	DK 1982-4745	
NO 8203557	A	19831010		19821026 <
AU 8289777	Α	19831013	AU 1982-89777	19821026 <
AU 560513	B2	19870409		
JP 58177981	Α	19831018	JP 1982-186908	19821026 <
HU 29187	A2	19840130		19821026 <
HU 191076	В	19870128		
CA 1189858	A1	19850702		19821026 <
US 4524209	A	19850618		
US 4591586	A	19860527		
US 4598152	A	19860701		
PRIORITY APPLN. INFO.:			US 1982-366245	19820409
			EP 1982-109802	19821023
OTHER SOURCE(S):	CASREA	CT 100:85	679; MARPAT 100:85679	

OI

GI

AB Antipsychotic, antihypertensive, and analgesic title compds I (R = N-containing heterocyclic) were prepared Thus I (R = Cl) was treated with pyrrolidine to give I (R = pyrrolidinyl)(II). II had an ED50 of 1.2 mg/kg against phenyl-p-quinone induced writhing in mice.

IT 88793-02-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation, analgesic, and antipsychotic activity of)

RN 88793-02-6 CA

CN 1,2-Benzisoxazole, 6-fluoro-3-[3-[4-(phenylthio)-1-piperidinyl]propyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

L11 ANSWER 66 OF 66 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

89:6187 CA

TITLE:

Psychoactive agents. Part V. Synthesis and CNS depressant activity of some pyridyl and piperidyl

ethers

AUTHOR(S):

Arya, V. P.; David, J.; Grewal, R. S.; Marathe, S. B.;

Patil, S. D.; Shenoy, S. J.

CORPORATE SOURCE:

Res. Cent., Ciba-Geigy, Bombay, India

SOURCE:

Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1977

), 15B(12), 1125-8

CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE:

LANGUAGE:

Journal English

OTHER SOURCE(S):

CASREACT 89:6187

GΙ

AB Pyridyl and piperidyl ethers related to Viloxazine were prepared Pyridyl ethers I (R = H, R1 = F, R2 = R3 = H, 3-, 4-y1, R = R1 = H, R2 = R3 = C1,2-, 3-, 4-y1, R = NO2, R1 = H, R2 = R3 = C1, 3-y1, n = 0, R = R1 = H, R2 = R1R3 = C1, 3-y1, n = 1, Z = 0); thioether I (R = R1 = H, R2 = R3 = C1, 2-y1, n = 1, Z = S); ether II (Z = O, 3-yl), and thio ether II (Z = S, 2-yl), useful as nervous system depressants and sedatives, were prepared by alkylating hydroxy- or mercaptopyridines or -pyridine oxides with 4,2,6-R1R2R3C6H2CH2Cl or 6-chloropiperonyl chloride. 2,6-Cl2C6H3CH2Cl and 3-pyridinol gave predominantly betaine III. Picolyl ethers IV (R4 = C1, OMe, 2-, 3-, 4-y1, R4 = Me, 2-y1, R5 = R6 = H; R4 = R5 = H, R6 = F, 2-, 3-yl; R4 = R6 = H, R5 = F, 3-yl) were prepared by alkylation of phenols 2,6,3,4-R24R5R6C6HOH with picolyl chlorides. Similarly prepared were pipecolyl ethers V (Z1 = 0, m = 1, 3-yl) and thio ethers V (Z1 = S, m = 0, 4-yl, m = 1, 3-yl). Depressant activity for several title compds. was given.

IT 66496-81-9P

RN 66496-81-9 CA

CN Piperidine, 4-[(4-fluorophenyl)thio]-1-methyl-, 2-hydroxy-1,2,3-propanetricarboxylate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 66496-80-8 CMF C12 H16 F N S

CM 2

CRN 77-92-9 CMF C6 H8 O7

$$\begin{array}{c} {\rm CO_2H} \\ | \\ {\rm HO_2C-CH_2-C-CH_2-CO_2H} \\ | \\ {\rm OH} \end{array}$$

=> d ibib abs fhitstr 1-45

L12 ANSWER 1 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

146:184491 CA

TITLE:

Preparation of Benzothiazole Heteroaromatic

Derivatives as Inhibitors of Stearoyl-Coenzyme A

 δ -9 Desaturase

INVENTOR(S):

Black, Cameron; Deschenes, Denis; Gagnon, Marc;

Lachance, Nicolas; Leblanc, Yves; Leger, Serge; Li,

Chun Sing; Oballa, Renata M.

PATENT ASSIGNEE(S):

SOURCE:

Merck Frosst Canada Ltd., Can.

PCT Int. Appl., 108pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
						-												
WO	2007	0092	36		A1 20070125			WO 2006-CA1175						20060718				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	ΚP,	
		KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	
		MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,	
•		SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,	ŪĠ,	
		US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW										
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,	
		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	ΚZ,	MD,	RU,	TJ,	TM											
PRIORITY	APP	LN.	INFO	. :					Ţ	US 2	005-	7007	98P		P 20	050	720	
									Ţ	US 2	005-1	73843	35P	:	P 20	0051	121	
GI																		

Benzothiazole heteroarom. derivs. I, wherein R1 can be a Ph, naphthyl or AB heteroarom. ring; n is 1, 2 or 3; W and Z are independently CH or N, provided that at least one of W or Z is N; X-Y is an amide, sulfonamide, (un) substituted amine, (un) substituted alkane; and Ar can be (un) substituted Ph, benzyl, naphthyl or heteroaryl groups are prepared as selective inhibitors of stearoyl-CoA δ -9 desaturase (SCD1) relative to other known stearoyl-CoA desaturases. Thus, II was prepared and tested an in vitro inhibitor of SCD1 (no data). Further, I are useful for the prevention and treatment of conditions related to abnormal lipid synthesis and metabolism, including cardiovascular disease atherosclerosis, lipid disorders, obesity, diabetes, neurol. disease, metabolic syndrome, insulin resistance, and fatty liver disease.

IT 921607-07-0P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzothiazole heteroarom. derivs. as inhibitors of stearoyl-CoA delta-9 desaturase)

921607-07-0 CA RN

CN Pyridazine, 3-(1,3,4-oxadiazol-2-yl)-6-[4-[[2-(trifluoromethyl)phenyl]thio]-1-piperidinyl]- (CA INDEX NAME)

REFERENCE COUNT: THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS 13 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

146:163136 CA

TITLE:

Preparation of heteroarylbenzylpiperazines as GPR38

INVENTOR(S):

receptor agonists

MacDonald, Gregor James; Stanway, Steven James; Thompson, Mervyn; Westaway, Susan Marie

PATENT ASSIGNEE(S):

SOURCE:

Glaxo Group Limited, UK PCT Int. Appl., 93pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	KIND DATE		APPLICATION NO.							DATE							
							-											
	WO	2007	0070	18		A1 20070118			1	WO 2	005-0	GB27	20050712					
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ĄU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	ĎE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	ΚP,	KR,	KZ,
			LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,
			NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
			SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ΥU,
			ZA,	ZM,	ZW													
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
			ΙS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
			GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	ΚZ,	MD,	RU,	TJ,	TM										
P	RIORITY	APP	LN. :	INFO	. :					1	WO 2	005-0	GB27	31		2	050	712
G.	Ι																	

AB Title compds. [I; X = CH2, CO, SO2; R1 = alkyl; R2 = YR7; R1R2N =
 (substituted) 4-7 membered heterocyclyl; R3, R4, Z = H, alkyl; R5 = H,
 halo, alkoxy; R6 = H, halo, alkoxy; Y = CO(CH2)n, SO2(CH2)n, (CH2)n,
 (CH2)nA, CO(CH2)nA, SO2(CH2)nA; n = 1-4; A = O, S, CO, SO2, NH, NHCO,
 alkylimino; B = 5-6 membered heteroaryl], were prepared Thus,
 4-[2-[[4-[(4-fluorophenyl)methyl]-1-piperidinyl]carbonyl]-3 pyridinyl]benzaldehyde, (2R,6S)-2,6-dimethylpiperazine, and NaBH(OAc)3
 were stirred together in CH2Cl2 for 1 day to give (3R,5S)-3,5-dimethyl-1 [[4-[2-[[4-[(4-fluorophenyl)methyl]piperidin-1-yl]carbonyl]pyridin-3 yl]phenyl]methyl]piperazine. The latter showed pEC50 >6.0 in a GPR38
 FLIPR functional agonist assay.

Ι

IT 920510-57-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compound; preparation of heteroarylbenzylpiperazines as GPR38 agonists)

RN 920510-57-2 CA

CN Methanone, [4-[(4-chlorophenyl)thio]-1-piperidinyl][3-[4-[[(3R,5S)-3,5-dimethyl-1-piperazinyl]methyl]-3-fluorophenyl]-2-pyridinyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS 11 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 45 CA

ACCESSION NUMBER:

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

COPYRIGHT 2007 ACS on STN

146:121827 CA

Piperidine derivatives useful as histamine H3 antagonists and their preparation, pharmaceutical compositions and use in the treatment of diseases Aslanian, Robert G.; Berlin, Michael Y.; Boyce,

Christopher W.; Chao, Jianhua; De Lera Ruiz, Manuel; Mangiaracina, Pietro; McCormick, Kevin D.; Mutahi, Mwangi W.; Rosenblum, Stuart B.; Shih, Neng-Yang; Solomon, Daniel M.; Tom, Wing C.; Vaccaro, Henry A.;

Zheng, Junying; Zhu, Xiaohong Schering Corporation, USA

PCT Int. Appl., 119pp.

CODEN: PIXXD2

Patent English

PATENT I	KIND DATE			APPLICATION NO.						DATE						
					_											
WO 2007	WO 2007001975				A1 20070104		Ī	WO 2	006-1	JS238	800	20060619				
W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KN,	ΚP,	KR,
	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,
	MX,	MZ,	NA,	NG,	NI,	NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,	SC,
	SD,	SE,	SG,	SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,
	UZ,	VC,	VN,	ZA,	ZM,	ZW										
RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DÈ,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
	IS,	ΙT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤŻ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
•	KG,	ΚZ,	MD,	RU,	TJ,	TM										
US 2007	US 2007015807					2007	0118	1	US 2	006-4	45562	25		20	0060	519
PRIORITY APP					1	JS 2	005-0	5921	10P	1	2 20	0050	520			
OTHER SOURCE(S):				MARI	PAT	146:	12182	27								

GI

$$\begin{array}{c|c}
 & (R^5)_a & (R^6)_b \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & &$$

Disclosed are novel compds. of the formula I or a pharmaceutically AB acceptable salt thereof; compns. and methods of treating allergy-induced airway responses, congestions, obesity, metabolic syndrome, alc. fatty liver disease, hepatic steatosis, nonalcoholic steatohepatitis, cirrhosis, hepatacellular carcinoma and cognitive deficit disorders, using said compds., alone or in combination with other agents. Compds. of formula I wherein M1 and M3 are independently CH and N; M2 is CH, CF and N; Y is CO, CS, C1-5 alkyl, C-NOH and derivs., and SO1-2; X is NH and derivs., aminoalkyl, alkylamino, , C0-3 alkyl, etc.; Z is bond, (un)substituted C1-6 alkyl, (un) substituted alkoxy, (un) substituted alkylamino, etc.; R1 is H, (un) substituted alkyl, (un) substituted (hetero) cycloalkyl, (un) substituted (hetero) aryl, etc.; R2 is (un) substituted alkyl, (un) substituted alkenyl, (un) substituted (hetero) aryl, and (un) substituted (hetero)cycloalkyl; R3 is H, alkyl, (un)substituted (hetero)aryl, (un) substituted (hetero) cycloalkyl, and CONH2; R5 and R6 are independently halo, alkyl, OH, alkoxy, haloalkyl, CN, etc.; a and b are independently 0, 1 and 2; n and p are independently 1, 2 and 3; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by etherification ot N-Boc-piperidin-4-ol with 3,5-dichlorophenol; the resulting N-Boc-4-(3,5-dichlorophenoxy) underwent hydrolysis to give 4-(3,5-dichlorophenoxy)piperidine, which underwent amidation with N-[2-(tert-butoxycarbonylamino)pyridin-4-ylmethyl]piperidine-4-carboxylic acid lithium salt; the resulting amide underwent hydrolysis to give compound II. All the invention compds. were evaluated for their histamine antagonistic activity (data given).

F 918532-05-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(drug candidate; preparation of piperidine derivs. as histamine H3 antagonists useful in treatment of diseases)

918532-05-5 CA

(Uses)

Methanone, [1-[(2-amino-4-pyridinyl)methyl]-4-piperidinyl][4-(phenylthio)-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

IT

RN

CN

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 45 CA

COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

145:419173 CA

TITLE:

Arylsulfonylpiperazines and related compounds as hydroxysteroid dehydrogenase inhibitors and their

preparation and pharmaceutical compositions

Aertgeerts, Kathleen; Brennan, Nancy, K.; Cao,

Sheldon, X.; Chang, Edcon; Kiryanov, Andre, A.; Liu,

Yan

8

PATENT ASSIGNEE(S):

Takeda San Diego, Inc., USA

SOURCE:

PCT Int. Appl., 199pp. CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR (S):

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2006105127	A2 20061005	WO 2006-US11347	20060328			
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW,	BY, BZ, CA, CH,			
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG,	ES, FI, GB, GD,			
GE, GH, GM,	HR, HU, ID, IL,	IN, IS, JP, KE, KG,	KM, KN, KP, KR,			
KZ, LC, LK,	LR, LS, LT, LU,	LV, LY, MA, MD, MG,	MK, MN, MW, MX,			
MZ, NA, NG,	NI, NO, NZ, OM,	PG, PH, PL, PT, RO,	RU, SC, SD, SE,			
SG, SK, SL,	SM, SY, TJ, TM,	TN, TR, TT, TZ, UA,	UG, US, UZ, VC,			
VN, YU, ZA,	ZM, ZW					
RW: AT, BE, BG,	CH, CY, CZ, DE,	DK, EE, ES, FI, FR,	GB, GR, HU, IE,			
IS, IT, LT,	LU, LV, MC, NL,	PL, PT, RO, SE, SI,	SK, TR, BF, BJ,			
CF, CG, CI,	CM, GA, GN, GQ,	GW, ML, MR, NE, SN,	TD, TG, BW, GH,			
GM, KE, LS,	MW, MZ, NA, SD,	SL, SZ, TZ, UG, ZM,	ZW, AM, AZ, BY,			
KG, KZ, MD,	RU, TJ, TM					
US 2006223829	A1 20061005	US 2006-392297	. 20060328			
PRIORITY APPLN. INFO.:		US 2005-667297P	P 20050331			
OTHER SOURCE(S):	MARPAT 145:41917	73				
GI						

$$R^{1}$$
 S
 $Y-A$
 R^{1}
 R^{1}
 R^{2}
 R^{2}
 R^{2}
 R^{2}
 R^{2}

Compds. of formula I, pharmaceutical compns., kits and methods are AB provided for use with hydroxysteroid dehydrogenases that comprise a compound selected from the group consisting of: formula I. Compds. of formula I wherein A and B are independently CH2, CH2CH2, and CH2CH2CH2; n is an integer 0 - 10; X is NH and derivs., and CR4R5; Y is N and CR10; R1 is (un) substituted C3-12 (hetero) cycloalkyl, (un) substituted C9-12 (hetero)bicycloalkyl, (un)substituted (hetero)aryl, (un)substituted C9-12 bicycloaryl, and (un)substituted C4-12 heterobicycloaryl; R2 is H, NO2, CN, S, OH, alkoxy, (hetero)aryloxy, carbonyl, amino, etc.; R4 is halo, NO2, CN, S, OH, alkoxy, (hetero)aryloxy, carbonyl, amino, etc.; R5 is H, halo, CN, NO2, S, OH, alkoxy, (hetero)aryloxy, CO, amino, etc.; R10 NO2, CN, S, OH, alkoxy, (hetero)aryloxy, CO, amino, etc.; are claimed. Example compound II was prepared by sulfonylation of 1-phenylpiperazine with 3-methoxybenzenesulfonyl chloride. All the invention compds. were evaluated for their hydroxysteroid dehydrogenase inhibitory activity. ΙT 911643-98-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of arylsulfonylpiperazines and related compds. as hydroxysteroid dehydrogenase inhibitors)

RΝ 911643-98-6 CA

1-Piperidinecarboxylic acid, 4-[(2-chlorophenyl)thio]-, 1,1-dimethylethyl CNester (9CI) (CA INDEX NAME)

L12 ANSWER 5 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

145:271810 CA

TITLE:

Preparation of pyridyl non-aromatic nitrogenated heterocyclic-1-carboxylate ester derivatives as FAAH

inhibitors

INVENTOR(S):

Ishii, Takahiro; Sugane, Takashi; Maeda, Jun; Narazaki, Fumie; Kakefuda, Akio; Sato, Kentaro; Takahashi, Tatsuhisa; Kanayama, Takatoshi; Saitoh,

Chikashi; Suzuki, Jotaro; Kanai, Chisato

PATENT ASSIGNEE (S):

SOURCE:

Astellas Pharma Inc., Japan

PCT Int. Appl., 180pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.			KIN	D :	DATE		i	APPL:	ICAT	ION I	NO.		D	ATE	
WO 2006088075			71 20060924			,	WO 2006-JP302698						20060216			
WO 2006	0000	/ 5		A1		2000	0024		WO 2	006-	JP30.	2090		21	,,,,,,,	210
W:	ΑE,	AG,	ΑL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,

SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO:

JP 2005-40197 A 20050217
JP 2005-303065 A 20051018

OTHER SOURCE(S):

MARPAT 145:271810

GI

AB Title compds. I [HET = non-aromatic nitrogenated heterocycle; R1-R3 = H, OH, cyano, etc.; R4-R7 = H, halo, OH, etc.] and their pharmaceutically acceptable salts were prepared For example, reaction of 3-pyridyl 1-piperazinecarboxylate·2HCl with benzyl chloroformate followed by treatment with p-toluenesulfonic acid afforded compound II p-toluenesulfonic acid salt. In fatty acid amide hydrolase (FAAH) inhibition assays using human bladder epithelial cancer-derived cell, compound II p-toluenesulfonic acid salt exhibited the IC50 value of 0.093 nM. Compds. I are claimed useful for the treatment of increased urinary frequency, incontinence, etc.

IT 906736-04-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridyl non-aromatic nitrogenated heterocyclic-1-carboxylate ester derivs. as FAAH inhibitors)

RN 906736-04-7 CA

CN 1-Piperidinecarboxylic acid, 4-[[4-[(3-fluorophenyl)methoxy]phenyl]thio]-, 3-pyridinyl ester, mono(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

CRN 906736-03-6 CMF C24 H23 F N2 O3 S 10/500,517

CM 2

CRN 104-15-4 CMF C7 H8 O3 S

REFERENCE COUNT:

30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 45 CA

ACCESSION NUMBER:

TITLE:

COPYRIGHT 2007 ACS on STN

145:103719 CA

Preparation of 1,6-disubstituted-(3R,6R)-3-(2,3-

dihydro-1H-inden-2-yl)-2,5-piperazinedione derivatives as oxytocin receptor antagonists for the treatment of

pre-term labor, dysmenorrhea and endometriosis Leach, Colin Andrew; Liddle, John; Peace, Simon;

Philp, Joanne; Smith, Ian Edward David; Terrell,

Lamont Roscoe; Zhang, Jing

PATENT ASSIGNEE(S):

SOURCE:

Glaxo Group Limited, UK PCT Int. Appl., 148 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2006067462	A1 2006	0629 WO 2005-GB5007	20051222			
W: AE, AG, AL,	AM, AT, AU,	AZ, BA, BB, BG, BR, BW,	BY, BZ, CA, CH,			
CN, CO, CR,	CU, CZ, DE,	DK, DM, DZ, EC, EE, EG,	ES, FI, GB, GD,			
GE, GH, GM,	HR, HU, ID,	IL, IN, IS, JP, KE, KG,	KM, KN, KP, KR,			
KZ, LC, LK,	LR, LS, LT,	LU, LV, LY, MA, MD, MG,	MK, MN, MW, MX,			
MZ, NA, NG,	NI, NO, NZ,	OM, PG, PH, PL, PT, RO,	RU, SC, SD, SE,			
SG, SK, SL,	SM, SY, TJ,	TM, TN, TR, TT, TZ, UA,	UG, US, UZ, VC,			
VN, YU, ZA,	ZM, ZW					
RW: AT, BE, BG,	CH, CY, CZ,	DE, DK, EE, ES, FI, FR,	GB, GR, HU, IE,			
IS, IT, LT,	LU, LV, MC,	NL, PL, PT, RO, SE, SI,	SK, TR, BF, BJ,			
CF, CG, CI,	CM, GA, GN,	GQ, GW, ML, MR, NE, SN,	TD, TG, BW, GH,			
GM, KE, LS,	MW, MZ, NA,	SD, SL, SZ, TZ, UG, ZM,	ZW, AM, AZ, BY,			
KG, KZ, MD,	RU, TJ, TM	•				
PRIORITY APPLN. INFO.:		GB 2004-28235	A 20041223			
OTHER SOURCE(S):	MARPAT 145:	103719	,			

GI

AB Title compds. I [wherein A = (un) substituted alkylene; ring B = (un) substituted O/N/S-containing mono/bi/tricyclic (hetero) aryl; R2 = (un) substituted (cyclo) alkyl or phenyl] and physiol. acceptable derivs. thereof were prepared as oxytocin receptor antagonists. For instance, four-component condensation of [2-(aminomethyl)phenyl]methanol, 2-ethylbutanal, (2R)-2,3-dihydro-1H-inden-2-yl[[[(1,1dimethylethyl)oxy]carbonyl]amino]ethanoic acid, and 4-chlorophenyl isonitrile followed by deprotection/intramol. cyclocondensation in the presence of acetyl chloride in methanol gave diketopiperazine II. About 230 examples of I were tested and found to have antagonistic affinity at human oxytocin-1 receptors with pKi values of ≥ 6.9 in a FLIPR assay or/and \geq 7.5 in a fluorescence polarization assay, resp. Therefore, I and their pharmaceutical compns. are useful for the treatment or prevention of diseases mediated through the action of oxytocin, including pre-term labor, dysmenorrhea and endometriosis. IT 894781-13-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of dihydroindenyl piperazinediones as oxytocin receptor antagonists for treatment of pre-term labor, dysmenorrhea and endometriosis)

RN 894781-13-6 CA

CN 2,5-Piperazinedione, 3-(2,3-dihydro-1H-inden-2-yl)-6-(1-ethylpropyl)-1-[[2-(4-piperidinylthio)phenyl]methyl]-, (3R,6R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

2

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

145:103563 CA

TITLE: Preparation of piperidine derivatives as antagonists

of the CC chemokine receptor CCR1 and their use as

anti-inflammatory agents

Arnaiz, Damian O.; Chou, You-Ling; Kochanny, Monica INVENTOR(S):

J.; Lee, Wheeseong; Lu, Shou-Fu; Mengel, Anne;

Phillips, Gary; Wei, Guo Ping; Yu, Hongyi

PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 230 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
WO	2006				 A1	-	2006	0629	1	WO 2	 005-:	 EP13:	938		2	0051	220		
	W:	AE,	AG,	AL,	AM,	AT.	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		-	-	-	-		DE,												
		•	•	•	•		ID,		-				•		•				
		KZ.	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,		
		•	•	•	•	•	NZ,	•	-		•	•	•	•	•	•	•		
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,		
		VN,	YU,	ZA,	ZM,	ZW.		•	•		•	•	·	•	•	•	•		
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,		
							MC,												
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,		
							NA,												
		KG,	KZ,	MD,	RU,	ΤJ,	TM												
US	2006	1670	44		A1		2006	0727	1	US 2	005-	3053	22		20	0051	219		
PRIORIT	Y APP	LN.	INFO	. :	•				1	US 2	004-	6380	33P	1	P 20	0041	220		
OTHER SO	OURCE	(s):			MAR	PAT	145:	1035	53		,								
GI																			

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

Title compds. represented by the formula I [wherein Ar = Ph, pyridinyl, AB

(iso)quinolinyl; R1 = H, halo, (cyclo)alkyl, etc.; R2 = a bond, O, S, N(R8), N(R8)C(O) or C(R9)2; R3 = (un)substituted alkylene or alkenylene; R4 = CO, OCO, CS, CH2 or a bond; R5 = independently H, oxo, (halo)alkyl, etc.; R6 = CO, CS, C(R9)2, etc.; R8 = independently H, halo, (cyclo)alkyl, etc.; R9 = independently H, (halo)alkyl, aryl, etc.; R = (un)substituted Ph or 2-thienyl; and enantiomers, diastereomers, tautomers, salts, solvates and radiolabeled analogs thereof] were prepared as CC chemokine receptor CCR1 antagonists. For example, II was provided in a multi-step synthesis starting from 1-(5-chloro-2-hydroxyphenyl)urea. I and their pharmaceutical compns. are useful for the treatment of inflammatory disorders, such as multiple sclerosis, leukoencephalopathy, and etc.

TΤ 894769-70-1P, 1-[5-Chloro-2-[2-[4-[(4-fluorophenyl)thio]-1-

piperidinyl]-2-oxoethoxy]phenyl]urea

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted piperidine derivs. as antagonists of CC chemokine receptor CCR1 and their use as anti-inflammatory agents) 894769-70-1 CA

Piperidine, 1-[[2-[(aminocarbonyl)amino]-4-chlorophenoxy]acetyl]-4-[(4-CN fluorophenyl)thio] - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 8 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

145:20398 CA

TITLE:

ВN

Discovery of a Piperidine-4-carboxamide CCR5

Antagonist (TAK-220) with Highly Potent Anti-HIV-1

Activity

AUTHOR(S):

Imamura, Shinichi; Ichikawa, Takashi; Nishikawa, Youichi; Kanzaki, Naoyuki; Takashima, Katsunori; Niwa,

Shinichi; Iizawa, Yuji; Baba, Masanori; Sugihara,

Yoshihiro

CORPORATE SOURCE:

Pharmaceutical Research Division, Takeda

Pharmaceutical Company Limited, 2-17-85 Jusohonmachi,

Yodogawa-ku, Osaka, 532-8686, Japan

SOURCE:

Journal of Medicinal Chemistry (2006), 49(9),

2784-2793

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal LANGUAGE: English

We incorporated various polar groups into previously described piperidine-4-carboxamide CCR5 antagonists to improve their metabolic stability in human hepatic microsomes. Introducing a carbamoyl group into the Ph ring of the 4-benzylpiperidine moiety afforded the less lipophilic compound 5f, which possessed both high metabolic stability and good inhibitory activity of HIV-1 envelope-mediated membrane fusion (IC50 = 5.8 nM). Further optimization to increase potency led to the discovery of

IT

1-acetyl-N-{3-[4-(4-carbamoylbenzyl)piperidin-1-yl]propyl}-N-(3-chloro-4methylphenyl)piperidine-4-carboxamide (5m, TAK-220), which showed high CCR5 binding affinity (IC50 = 3.5 nM) and potent inhibition of membrane fusion (IC50 = 0.42 nM), as well as good metabolic stability. Compound 5m strongly inhibited the replication of CCR5-using HIV-1 clin. isolates in human peripheral blood mononuclear cells (mean EC50 = 1.1 nM, EC90 = 13 nM) and exhibited a good pharmacokinetic profile in monkeys (BA = 29%). This compound has been chosen as a clin. candidate for further development. 333991-84-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Discovery of a Piperidine-4-carboxamide CCR5 Antagonist with Highly Potent Anti-HIV-1 Activity)

RN 333991-84-7 CA

4-Piperidinecarboxamide, 1-acetyl-N-(3,4-dichlorophenyl)-N-[3-[4-[(4-CN fluorophenyl)thio]-1-piperidinyl]propyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

COPYRIGHT 2007 ACS on STN L12 ANSWER 9 OF 45 ÇA

ACCESSION NUMBER:

144:324123 CA

TITLE:

Affinity prediction on Al adenosine receptor agonists:

The chemometric approach

AUTHOR (S):

Fossa, Paola; Mosti, Luisa; Bondavalli, Francesco; Schenone, Silvia; Ranise, Angelo; Casolino, Chiara;

Forina, Michele

CORPORATE SOURCE:

Dipartimento di Scienze Farmaceutiche, Universita

degli Studi di Genova, Genoa, I-16132, Italy Bioorganic & Medicinal Chemistry (2006), 14(5),

1348-1363

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER:

SOURCE:

Elsevier B.V.

DOCUMENT TYPE:

LANGUAGE:

Journal English

In this paper, we are presenting a quant.-structure-activity relationship (QSAR) study performed on 21 selective A1 adenosine receptor agonists plus the endogenous substrate, adenosine, so as to identify those predictors which play a key role in describing the binding of the ligand with the Al receptor. A large number of mol. descriptors plus a calculated receptor-agonist

binding energy and atomic charges were taken into account to derive different QSAR models, using different regression techniques. The results obtained both with linear and nonlinear approaches converge to the selection of the same informative parameters, highlighting the correlation of these descriptors with the biol. Response. The evaluation a priori' of these

10/500,517

predictors could therefore represent a useful tool in the screening of large libraries of compds. and in the rational design of new selective agonists.

IT 169190-51-6, NNC 210147

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES

(affinity prediction on A1 adenosine receptor agonists)

RN 169190-51-6 CA

CN Adenosine, 2,5'-dichloro-5'-deoxy-N-[4-(phenylthio)-1-piperidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

144:22949 CA

TITLE:

Preparation of 2,3-dihydro-6-nitroimidazo[2,1-

b]oxazoles as antibacterial agents

INVENTOR(S):

Tsubochi, Hidetsugu; Sasaki, Hirofumi; Kuroda, Hideaki; Itotani, Motohiro; Hasegawa, Takeshi; Haraguchi, Yoshikazu; Kuroda, Takeshi; Matsuzaki, Takayuki; Tai, Kuninori; Komatsu, Makoto; Matsumoto, Makoto; Hashizume, Hiroyuki; Tomishige, Tatsuo; Seike, Yuji; Kawasaki, Masanori; Sumida, Takumi; Miyamura, Shin; Oguro, Kinue; Tanaka, Kazuho; Takemura, Isao

PATENT ASSIGNEE(S):

SOURCE:

Ohtsuka Pharmaceutical Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 1050 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 2005330266	Α	20051202	JP 2005-113726		20050411
PRIORITY APPLN. INFO.:			JP 2004-114975	Α	20040409
			JP 2004-125055	Α	20040421
OTHER SOURCE(S):	MARPAT	144:22949			

GI

$$Q = -0 \xrightarrow{(X)_{m}} Q^{1} = \sqrt{N - N \choose N} \qquad Q^{2} = \sqrt{N - R^{41}}$$

The title compds. [I; wherein R1 = H, C1-6 alkyl; n = an integer of 0-6; AB R2 = OR3, SR5, CO2R6, O2CNR7R8, Q, NR19R20, Q1; wherein R3 = H, C1-6 alkoxy, C1-6 alkoxy-C1-6 alkyl, (un)substituted phenyl-C1-6 alkoxy, biphenylyl-C1-6 alkoxy, phenyl-C2-6 alkenyl, C1-6 alkylsulfonyl, etc.; R5 = tetrazolyl or phenyltetrazolyl optionally substituted by halo or C1-6 alkyl on phenyl; R6 = C1-6 alkyl; R7, R8 = H, C1-8 alkyl, halo-C1-6 alkyl, C1-6 alkoxycarbonyl-C1-6 alkyl, C3-8 cycloalkyl, phenyl-C1-6 alkyl, Ph, naphthyl, pyridyl, etc.; X = halo, amino-C1-6 alkyl, C1-6 alkylamino-C1-6 alkyl; R11 = H, C1-6 alkyl, halo-C1-6 alkyl, C1-6 alkoxy, halo-C1-6 alkoxy, etc.; m = an integer of 0-3; R40 = C1-6 alkyl, Ph, halophenyl; or R1 and -(CH2)nR2 may be united via a nitrogen atom to form together with the adjacent carbon atom a spiro ring represented by the general formula Q2; wherein R41 = H, C1-6 alkyl, phenyl-C1-6 alkyl, biphenylyl-C1-6 alkyl, (un) substituted Ph, etc.] or optical isomers thereof or pharmacol. acceptable salts thereof are prepared These compds. exhibit excellent bactericidal activity against Tubercle bacillus, multiple drug resistant T. bacillus, and atypical acid-fast bacteria, and are useful as antitubercular agents. Thus, 0.43 g (S)-1-(2-chloro-4-nitroimidazol-1-yl)-2-methyl-3-[4-(4-trifluoromethoxyphenyl)piperazin-1-yl]propan-2-ol and 0.22 g 2-chloro-4-nitro-1H-imidazole were suspended in 4 mL MeCN, treated with 0.17 g NaHCO3, and refluxed for 9 h to give 31% (S)-1-(2-chloro-4nitroimidazol-1-yl)-2-methyl-3-[4-(4-trifluoromethoxyphenyl)piperazin-1yl]propan-1-ol which (5.85 g) was dissolved in 150 mL THF, treated with 0.66 g NaH under ice-cooling and refluxed for 6 h to give 48% (S)-2-[[4-(4-trifluoromethoxyphenyl)piperazin-1-yl]methyl]-2-methyl-6nitro-2,3-dihydroimidazo[2,1-b]oxazole (II). II and compound (III) showed min. inhibitory concentration of 0.024 and 0.0015 μg/mL, resp., against Mycobacterium tuberculosis H37Rv.

IT 681493-63-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of 2,3-dihydro-6-nitroimidazo[2,1-b]oxazoles as antibacterial agents and antitubercular agents)

RN681493-63-0 CA

CN Imidazo[2,1-b]oxazole, 2,3-dihydro-2-methyl-6-nitro-2-[[4-[[4-(trifluoromethoxy)phenyl]thio]-1-piperidinyl]methyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L12 ANSWER 11 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

143:405931 CA

TITLE: INVENTOR(S):

Preparation of benzotriazine inhibitors of kinases Noronha, Glenn; Barrett, Kathy; Cao, Jianguo; Gritzen, Colleen; Gong, Xianchang; Hood, John; Mak, Chi Ching; Mcpherson, Andrew; Pathak, Ved Prakash; Renick, Joel; Soll, Richard; Splittgerber, Ute; Wrasidlo, Wolfgang;

Zeng, Binqi; Zhao, Ningning; Dneprovskaia, Elena

PATENT ASSIGNEE(S):

SOURCE:

Targegen, Inc., USA

PCT Int. Appl., 375 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2005096784	A2 20051020	WO 2005-US12057	20050407			
W: AE, AG, AL,	AM, AT, AU, AZ, BA	A, BB, BG, BR, BW, B	Y, BZ, CA, CH,			
CN, CO, CR,	CU, CZ, DE, DK, DN	M, DZ, EC, EE, EG, E	S, FI, GB, GD,			
GE, GH, GM,	HR, HU, ID, IL, IN	N, IS, JP, KE, KG, KI	M, KP, KR, KZ,			
LC, LK, LR,	LS, LT, LU, LV, MA	A, MD, MG, MK, MN, M	W, MX, MZ, NA,			
NI, NO, NZ,	OM, PG, PH, PL, PT	r, ro, ru, sc, sd, s:	E, SG, SK, SL,			
		Z, UA, UG, UZ, VC, VI				
		A, SD, SL, SZ, TZ, U				
AZ, BY, KG,	KZ, MD, RU, TJ, TM	4, AT, BE, BG, CH, C	Y, CZ, DE, DK,			
EE, ES, FI,	FR, GB, GR, HU, IE	E, IS, IT, LT, LU, M	C, NL, PL, PT,			
RO, SE, SI,	SK, TR, BF, BJ, CF	F, CG, CI, CM, GA, G	N, GQ, GW, ML,			
MR, NE, SN,	TD, TG					
AU 2005231507	A1 20051020	AU 2005-231507	20050407			
CA 2567574	A1 20051020	CA 2005-2567574	20050407			
US 2005245524	A1 20051103	US 2005-102405	20050407			
PRIORITY APPLN. INFO.:	•	US 2004-561237P	P 20040408			
		US 2005-643439P	P 20050112			
•		WO 2005-US12057	W 20050407			
OTHER SOURCE(S):	MARPAT 143:405931					

GI

$$\begin{bmatrix} \mathbb{R}^{3} \\ \mathbb{R}^{3} \\ \mathbb{R}^{2} \end{bmatrix} \xrightarrow{\mathbb{R}^{2}} \begin{bmatrix} \mathbb{R}^{3} \\ \mathbb{R}^{3} \\ \mathbb{R}^{2} \end{bmatrix} \xrightarrow{\mathbb{R}^{2}} \begin{bmatrix} \mathbb{R}^{3} \\ \mathbb{R}^{3} \\ \mathbb{R}^{3} \end{bmatrix} \xrightarrow{\mathbb{R}^{3}} \begin{bmatrix} \mathbb{R}^{3} \\ \mathbb{R}^{3} \end{bmatrix}$$

The title compds. I [each of A and each of B = CH0-1, N, NH, O, S; R0 = H, alkyl; L = a bond, alkyl, alkenyl, alkynyl; R1 = hydroxy, alkoxy, (un)substituted NH2, etc.; R2 = Me, Et, OH, etc.; R3 = H, alkyl, alkoxy, etc.; n = 0-5; with provisions] which are capable of inhibiting kinases, such as members of the Src kinase family, and various other specific receptor and non-receptor kinases, were prepared E.g., a multi-step synthesis of II, starting from 7-bromobenzo[1,2,4]triazin-3-ylamine-1-oxide and 2,6-dimethylphenylboronic acid, was given. II possesses an IC50 value of 15 nM for Src kinase. Pharmaceutical compns. comprising the compound I are disclosed.

IT 867331-40-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzotriazines as kinase inhibitors for treating a disorder associated with compromised vasculostasis)

RN 867331-40-6 CA

CN 1-Piperidinecarboxylic acid, 4-[(4-bromophenyl)thio]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L12 ANSWER 12 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

143:386926 CA

TITLE:

Preparation of N-(2-pyridyl)cyclic amine derivatives

as pest control agents -

INVENTOR (S):

Hamamoto, Isami; Takahashi, Jun; Yano, Makio; Hanai,

Daisuke; Iwasa, Takao

PATENT ASSIGNEE(S):

Nippon Soda Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 183 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	TENT		KIND DATE A1 20051013					APPLICATION NO.										
WO	2005	0953	80	•	A1		2005	1013	1						2	0050	330	
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	ΒA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		-	-	OM,	-		-	-	-	-	-	-			-	-	-	
		SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	.VN,	YU,	ZA,	ZM,	zw
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	ΝL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	
		MR,	NΕ,	SN,	TD,	TG												
AU	2005	2282	89		A1		2005	1013	7	AU 20	005-	2282	89		2	0050	330	
EP	1731	518			A1		2006	1213]	EP 20	005-	7286	46		20	0050	330	
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,	
		HR,	LV,	MK,	YU													
PRIORIT	Y APP	LN.	INFO	. :						JP 20	004-	1066	68	i	A 20	0040	331	
										JP 20	004-3	3740	07		A 20	0041	224	
		•							1	WO 20	005-	JP688	B7	. 1	W 2	0050	330	
OTHER SO	OURCE	(S):			MARI	PAT	143:	3869:	26									

C GΙ

$$(R^{1})_{m}$$

$$X$$

$$R^{7}$$

$$R^{6}$$

$$R^{1}$$

$$R^{6}$$

$$R^{4}$$

$$R^{2}$$

$$R^{2}$$

$$R^{2}$$

$$R^{2}$$

$$R^{2}$$

$$R^{2}$$

$$R^{2}$$

$$R^{2}$$

$$R^{2}$$

AB The title compds. (I) [R1 = HO, halo, cyano, NO2, CHO, each (un) substituted C1-6 alkyl, C1-6 alkoxy, NH2, or 5- or 6-membered heterocyclyl containing at least one heteroatom selected from O, N, and S, C2-6 alkenyl, C2-6 alkynyl, C1-6 haloalkyl, C1-6 haloalkenyl, C1-6 alkylcarbonyl, C1-6 haloalkoxy, C2-6 alkenyloxy, C2-6 haloalkenyloxy, C2-6 alkynyloxy, C1-6 alkylcarbonyloxy, C1-6 alkoxycarbonyloxy, C1-6 alkylthiocarbonyloxy, C1-6 alkylthio, C1-6 haloalkylthio, C1-6 alkylsulfinyl, C1-6 haloalkylsulfinyl, C1-6 alkylsulfonyl, etc.; m = 0-5; R2 = halo, NO2, C1-6 alkyl, C1-6 alkoxy, C1-6 haloalkyl, (un)substituted 5- or 6-membered heterocyclyl containing at least one heteroatom selected from O, N, and S; k = 0-4; R3, R31 R4, R41, R5, R51, R6, R61, R7 = H, C1-6 alkyl, C1-6 alkoxycarbonyl, C1-6 alkoxy; or R3 and R4 or R5 and R6 together form a saturated ring; X = 0, S(0), S(0)2; n = 0, 1], salts, or N-oxide thereof are prepared Thus, a solution of 3.0 g 4-hydroxypiperidine and 5.4 g 2-chloro-5-trifluoromethylpyridine in 25 mL ethanol was treated with 4.5 g Et3N and refluxed overnight to give 5.98 g 1-[5-(Trifluoromethyl)pyridin-2-yl]piperidin-4-ol (II). A solution of II 4.9; 5-hydroxy-2-nitrobenzotrifluoride 3.2, and Ph3P 5.6 g in 30 mL THF was

Ι

10/500,517

treated dropwise with a solution of 4.3 g diisopropyl azodicarboxylate in 30 mL THF under ice-cooling, warmed to room temperature, and stirred for 3 h to give 5.98 g 4-[4-Nitro-3-(trifluoromethyl)phenoxy]-1-[5-(trifluoromethyl)-2-pyridyl]-piperidine (III). A solution of 5.7 g III in 300 mL ethanol was treated with 18.8 g zinc powder and 1.9 g CaCl2.2H2O and refluxed overnight to give 5.4 g 4-[4-Amino-3-(trifluoromethyl)phenoxy]-1-[5-(trifluoromethyl)-2-pyridyl]-piperidine (IV). IV at 125 ppm controlled 100% adult Tetranychus urticae on kidney bean leaf.

IT 866615-42-1P, 4-[2-Propoxy-4-(trifluoromethyl)phenylsulfanyl]-1-[5 (trifluoromethyl)-2-pyridyl]piperidine
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
 (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(preparation of N-(2-pyridyl) cyclic amine derivs. as pesticides such as insecticides and miticides)

RN 866615-42-1 CA

Pyridine, 2-[4-[[2-propoxy-4-(trifluoromethyl)phenyl]thio]-1-piperidinyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 13 OF 45 CA COPYRIGHT 2007 ACS on STN

28

ACCESSION NUMBER:

142:212366 CA

TITLE:

CN

Fibrosis inhibitors containing pyridine derivatives and their use for drugs to prevent progression of cirrhosis, chronic pancreatitis, and/or pulmonary

hypertension

INVENTOR(S):

Katsuramaki, Tadashi; Hirata, Koichi

PATENT ASSIGNEE(S):

Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 43 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

': 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005041837	A	20050217	JP 2003-279360	20030724
JP 3700854	B2	20050928		
PRIORITY APPLN. INFO.:			JP 2003-27 <u>9</u> 360	20030724
OTHER SOURCE(S):	MARPAT	142:212366		
GT				

AB Fibrosis inhibitors, which inhibit fibrosis in liver, pancreas, lung, etc., induced by increase in TGFβ1 or activation of Kupffer cells, contain pyridine derivs. I [X = (CH2)5, (CH2)4, (CH2)3; R1 = halobenzofuranyl, halostyryl; R2 = C1-6 (halo)alkyl, heterocyclyl which may be substituted with ≥1 C1-6 (halo)alkyl, (halo)alkoxy, or halo, aryl which may be substituted with C1-6 (halo)alkyl, alkoxy, or halo; Y = O, S, SO2] or their pharmacol. acceptable salts. Thus, (2E)-3-(4-chlorophenyl)-N-[(1S)-2-oxo-2-[[2-oxo-2-[4-[[6-(trifluoromethyl)-4-pyrimidinyl]oxy]-1-piperidinyl]ethyl]amino]-1-(2-pyridylmethyl)ethyl]-2-propenamide (preparation given) significantly suppressed inflammatory cell infiltration and fibrosis in thioacetamide-induced cirrhotic rats.

IT 442199-03-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridine derivs. as fibrosis inhibitors for treatment of cirrhosis, chronic pancreatitis, and pulmonary hypertension)

RN 442199-03-3 CA

CN

2-Pyridinepropanamide, α -[[(2E)-3-(4-chlorophenyl).-1-oxo-2-propenyl]amino]-N-[2-[4-[(4-chlorophenyl)thio]-1-piperidinyl]-2-oxoethyl]-, (α S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L12 ANSWER 14 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

142:93701 CA

TITLE:

Novel aza-ring derivatives and their use as monoamine

neurotransmitter re-uptake inhibitors

INVENTOR(S):

Peters, Dan; Olsen, Gunnar M.; Nielsen, Elsebet

Ostergaard; Scheel-Krueger, Jorgen

PATENT ASSIGNEE(S):

SOURCE:

Neurosearch A/S, Den. PCT Int. Appl., 24 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				·
WO 2004113297	7 A2	20041229	WO 2004-EP51166	20040618
WO 2004113297	7 A9	20051124		
WO 2004113297	7 A3	20060119	·	
W: AE, A	AG, AL, AM,	AT, AU, AZ,	BA, BB, BG, BR, BW,	BY, BZ, CA, CH,
CN, C	CO, CR, CU,	CZ, DE, DK,	DM, DZ, EC, EE, EG,	ES, FI, GB, GD,
GE, C	SH, GM, HR,	HU, ID, IL,	IN, IS, JP, KE, KG,	KP, KR, KZ, LC,
LK, I	LR, LS, LT,	LU, LV, MA,	MD, MG, MK, MN, MW,	MX, MZ, NA, NI,
			RO, RU, SC, SD, SE,	
TJ, T	rm, TN, TR,	TT, TZ, UA,	UG, US, UZ, VC, VN,	YU, ZA, ZM, ZW
			NA, SD, SL, SZ, TZ,	
•			TM, AT, BE, BG, CH,	
			IE, IT, LU, MC, NL,	
			CI, CM, GA, GN, GQ,	
The state of the s	rD, TG	,,	on, on, on, on,	0, 1.2, 1.1., 1.2,
•	•	20060329	EP 2004-741836	20040618
			GB, GR, IT, LI, LU,	
			CY, AL, TR, BG, CZ,	
			US 2005-561986	
PRIORITY APPLN. IN		20070125	DK 2003-941	·
PRIORITI APPEN. II	vro		US 2003-482565P	
OTHER COIDER (C)	MADD.	7m 140.02001	WO 2004-EP51166	w 20040618
OTHER SOURCE(S):	MARP	AT 142:93701	•	
GI				•

The invention relates to novel aza-ring derivs. useful as monoamine AB neurotransmitter reuptake inhibitors. Other aspects of the invention relate to the use of these compds. in a method of therapy, and to pharmaceutical compns. comprising the compds. In particular, compds. I are claimed, including any isomers, mixts. of isomers, or pharmaceutically acceptable salts [wherein: Ra = H or alkyl; m = 0-2; n = 1-5; with the proviso that the sum of m and n equals 2-5; X = O, S, or NRc; Rc = H, alkyl, C(0)Rd or SO2Rd; Rd = H or alkyl; Rb = aryl or heteroaryl, both optionally substituted with one or more of halo, CF3, CF3O, cyano, OH, amino, nitro, alkoxy, cycloalkoxy, alkyl, cycloalkyl, cycloalkylalkyl, alkenyl, and alkynyl]. I were tested for their ability to inhibit reuptake of the monoamines dopamine, noradrenaline, and serotonin in synaptosomes. Preferred compds. showed biol. activity in the submicromolar and micromolar range, i.e., from below 1 to 100 μM . in the treatment of a wide variety of CNS disorderes is claimed. preferred embodiment, I are considered useful for the treatment,

prevention, or alleviation of depression. Over 50 examples of I free bases and salts were prepared and/or claimed. For instance, 4-hydroxypiperidine was treated with NaHCO3 and Boc2O to give the N-Boc derivative (100%), which underwent Mitsunobu etherification with 2,3-dichlorophenol (70%) and deprotection with HCl in AcOH (81%) to give II.HCl.

IT 817186-89-3P, 4-(2,3-Dichlorothiophenoxy)-1-methylpiperidine fumarate

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of aza-ring derivs. as monoamine neurotransmitter reuptake inhibitors)

RN 817186-89-3 CA

CN Piperidine, 4-[(2,3-dichlorophenyl)thio]-1-methyl-, (2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 817186-88-2 CMF C12 H15 C12 N S

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

L12 ANSWER 15 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

TITLE:

142:23205 CA

Preparation of quinoline derivatives as

phosphodiesterase inhibitors

INVENTOR(S):

Baldwin, Ian Robert; Barker, Michael David; Dean, Anthony William; Eldred, Colin David; Evans, Brian; Gough, Sharon Lisa; Guntrip, Stephen Barry; Hamblin, Julie Nicole; Holman, Stuart; Jones, Paul; Lindvall, Mika Kristian; Lunniss, Christopher James; Redfern, Tracy Jane; Redgrave, Alison Judith; Robinson, John

Edward; Woodrow, Michael

PATENT ASSIGNEE(S):

SOURCE:

Glaxo Group Limited, UK PCT Int. Appl., 243 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

Eng

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

										APPLICATION NO.						DATE			
											2004-:					0040			
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB	, BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS	, JP,	KΕ,	KG,	KΡ,	KR,	ΚZ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG	, MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU	, sc,	SD,	SE,	SG,	SK,	SL,	SY,		
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	ÙS	, UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD	, SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,		
		AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT	, BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
											, LU,								
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM	, GA,	GN,	GQ,	GW,	ML,	MR,	NE,		
		SN,	TD,	TG															
AU	2004	2407	59		A1		2004	1202		AU :	2004-	2407	59		2	0040	519		
CA	2526	228			A1		2004	1202		CA	2004-	2526	228		2	0040	519		
	1633						2006	0315		EP	2004-	7337	99		2	0040	519		
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,	FI,	RO,	CY,	TR,	BG	, CZ,	EE,	HU,	PL,	SK,	HR			
BR	2004	0104	77		Α		2006	0530		BR :	2004-	1047	7		2	0040	519		
	1823				A		2006			CN :	2004-	8002	0651		2	0040	519		
JP	2007	5012	64		T		2007	0125		JP	2006-	5298	89		2	0040	519		
NO	2005	0054	21		Α		2005	1220			2005-								
IN	2005	KN02	416		Α		2006	1013		IN :	2005-	KN24	16		2	0051	129		
US	2006	1784	16		A1		2006	0810	,	US :	2006-	3496	77		2	0060	208		
US	2007	0495	70		A1		2007	0301			2006-					0060			
PRIORIT	Y APP	LN.	INFO	. :						GB :	2003-	1168	8		A 2	0030	521		
										GB :	2003-	2618	7		A 2	0031	110		
										WO :	2004-1	EP54	94		W 2	0040	519		
										US :	2006-	5570	79		A1 2	0060	523		
OTUTO C	OTTOCE	101.			MADI	ייית	1/2.	22201	=										

OTHER SOURCE(S):

MARPAT 142:23205

GI

Title compds. represented by the formula I (wherein R1 = (un)substituted (cyclo)alkyl, (hetero)aryl, cycloalkylalkyl, etc.; R2 = H or alkyl; R3 = H, (un)substituted SOnalkyl, 2-oxopyrrolidin-1-yl, cycloalkyl, etc.; R4 = H or SOnalkyl; R5 = H, halo, alkyl, alkoxy; n = 0-2; and pharmaceutically acceptable salts thereof] were prepared as phosphodiesterase inhibitors. For example, reaction of 4-chloro-6-(methylsulfonyl)-3-quinolinecarboxamide with 3-fluoroaniline gave II. Selected prepared compds. were tested for inhibition of PDE4B (human recombinant) enzyme and PDE5 with pIC50 values in the range of 6.0-11.7 and 4.5-7.0, resp. Thus, I and their pharmaceutical compns. are useful as phosphodiesterase

inhibitors, especially PDE4 inhibitors, for the prophylaxis or treatment of a clin. condition, such as inflammatory and/or allergic diseases (no data).

IT 801310-90-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of quinoline derivs. as phosphodiesterase inhibitors for the treatment of inflammatory diseases).

RN 801310-90-7 CA

CN 1-Piperidinecarboxylic acid, 4-[[3-(aminocarbonyl)-4-[(2,3-dihydro-4-benzofuranyl)amino]-8-methyl-6-quinolinyl]thio]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 16 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

142:6426 CA

TITLE:

4-Arylsulfonylpiperidine derivatives for antagonism of

the 5-HT2A receptor and their preparation,

pharmaceutical compositions, and use

INVENTOR (S):

Gilligan, Myra; Humphries, Alexander Charles;

Ladduwahetty, Tamara

PATENT ASSIGNEE(S):

Merck Sharp & Dohme Limited, UK

SOURCE:

PCT Int. Appl., 34 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2004101518	A1 20041125	WO 2004-GB1998	20040507
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW, BY,	BZ, CA, CH,
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG, ES,	FI, GB, GD,
GE, GH, GM,	HR, HU, ID, IL,	IN, IS, JP, KE, KG, KP,	KR, KZ, LC,
LK, LR, LS,	LT, LU, LV, MA,	MD, MG, MK, MN, MW, MX,	MZ, NA, NI,
NO, NZ, OM,	PG, PH, PL, PT,	RO, RU, SC, SD, SE, SG,	SK, SL, SY,
TJ, TM, TN,	TR, TT, TZ, UA,	UG, US, UZ, VC, VN, YU,	ZA, ZM, ZW
RW: BW, GH, GM,	KE, LS, MW, MZ,	NA, SD, SL, SZ, TZ, UG,	ZM, ZW, AM,
AZ, BY, KG,	KZ, MD, RU, TJ,	TM, AT, BE, BG, CH, CY,	CZ, DE, DK,
EE, ES, FI,	FR, GB, GR, HU,	IE, IT, LU, MC, NL, PL,	PT, RO, SE,
SI, SK, TR,	BF, BJ, CF, CG,	CI, CM, GA, GN, GQ, GW,	ML, MR, NE,
SN, TD, TG			
AU 2004238608	A1 20041125	AU 2004-238608	20040507

GI

	25258				A1		2004				2004					20040	
EP	16417	756			A1		2006	0405		EΡ	2004-	-7316	51			20040	507
	R:	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE	, MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	CY,	TR,	BG	, CZ,	EE,	HU,	PL,	SK		
CN	17879	97			Α		2006	0614	4	CN	2004-	8001	3146			20040	507
JP	20065	286	75		T		2006	1221		JP	2006-	-5304	81 .			20040	507
US	20062	21173	35		A1		2006	0921	•	US	2005-	5529	31			20051	011
PRIORITY	APPI	LN.	INFO	. :					(GB	2003-	1134	9		A	20030	516
									1	WO	2004-	GB19	98		W	20040	507.
OTHER SO	URCE	(S):			MARE	TA	142:	6426									

Ι

01 R4

$$Q^{2} \xrightarrow{[]{}} F$$

$$Q^{3} \xrightarrow{[]{}} V$$

AB Compds. I are potent and selective antagonists of the human 5-HT2A receptor (no data), and hence are useful in the treatment of adverse conditions of the central nervous system, including sleep disorders such as insomnia, psychotic disorders such as schizophrenia, and psychiatric disorders such as anxiety. Claimed compds. include I and pharmaceutically acceptable salts [wherein: Ar = Ph; benzisothiazol-3-yl, or benzthiophen-3-yl, each with substituents R1, R2, and R3; R1 = H, F, C1, Br, alkyl, cycloalkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyloxy, or fluoroalkyl; R2 = H, F, Cl, alkyl, alkoxy, fluoroalkyl, or fluoroalkoxy; R3 = H, F, Cl, Me, MeO, CF3, CHF2, CF3O, or CHF2O; Q1 = H, F, Cl, Br, alkyl, cycloalkyl, alkenyl, alkynyl, alkoxy, alkenyloxy, alkynyloxy, fluoroalkyl, nitrile, COQ4 or CO2Q4 (Q4 = H or alkyl), NQ5Q6, CONQ5Q6, SO2NQ5Q6 (Q5, Q6 = H or alkyl, or Q5Q6 = atoms to form optionally substituted 4- to 7-membered N/O heterocyclic ring), OH, NO2, SOQ7, SOQQ7 (Q7 = alkyl), NQ8COQ9, NQ8COQQ9, NQ8SOQQ9 (Q8, Q9 = H or alkyl, or Q8Q9 forms a 5- to 7-membered ring), 5-membered N/O/S heteroarom. ring (with optional Me, Et, or OH substituents), 6-membered N heteroarom. or Ph ring (both optionally substituted by F, Cl, alkyl, alkoxy, or CF3); Q2 = H, F, Cl, nitrile, OH, alkyl, alkoxy, fluoroalkyl, fluoroalkoxy; Q3 = H, F, Cl, Me, MeO, CF3, CHF2, CF3O, or CHF2O; or Q2Q3 = atoms to form 5-, 6-, or 7-membered carbocycle; R4 = H or alkyl; m = 0-1; n = 0-2; W = CH2, CHF, CH(OH), or CO]. I typically display more effective binding to the human 5-HT2A receptor than to other human receptors such as D2, 5-HT2C and IKr receptors (no data). I can therefore be expected to manifest fewer side-effects than less selective compds. In particular, the lower effects

on the IKr receptor indicate the possibility that there is a separation of the desired effect from side effects such as cardiac effects. I generally have a human 5-HT2A receptor binding affinity (Ki) of 100 nM or less, typically of 50 nM or less, and preferably of 10 nM or less. I may possess at least a 10-fold selective affinity, suitably at least 20-fold, and preferably at least 50-fold, for the human 5-HT2A receptor relative to the human dopamine D2, IKr, and 5-HT2C receptors. Preferred I show selectivities of at least 100 fold relative to the human 5-HT2C receptor. Approx. 50 example compds. were prepared For instance, N-Boc-4-(4bromophenylthio) piperidine was oxidized with Oxone to the corresponding S-oxide (69%), which was fluorinated with DAST and further oxidized with mCPBA to give the 4-fluoro sulfone derivative (70%). Removal of the Boc group (80%) and N-alkylation using K2CO3 and 2,4-difluorophenethyl bromide (51%) gave invention compound II.

IT 188527-03-9, N-BOC-4-[(4-bromophenyl)thio]piperidine RL: RCT (Reactant); RACT (Reactant or reagent)

(starting material; preparation of arylsulfonylpiperidine derivs. as 5-HT2A receptor antagonists)

188527-03-9 CA RN

1-Piperidinecarboxylic acid, 4-[(4-bromophenyl)thio]-, 1,1-dimethylethyl CN ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 17 OF 45 CA COPYRIGHT 2007 ACS on STN

3

ACCESSION NUMBER:

TITLE:

141:395422 CA

Preparation of N-[(piperidinyloxy)phenyl]-,

N-[(piperidinyloxy)pyridinyl]-, N-[(piperidinylsulfanyl)phenyl]-, and

N-[(piperidinylsulfanyl)pyridinyl]amides as 5-HT1F

agonists for treatment of migraine

INVENTOR(S):

Blanco-Pillado, Maria-Jesus; Benesh, Dana Rae; Filla,

Sandra Ann; Hudziak, Kevin John; Mathes, Brian Michael; Kohlman, Daniel Timothy; Ying, Bai-Ping;

Zhang, Deyi; Xu, Yao-Chang

PATENT ASSIGNEE(S):

SOURCE:

Eli Lilly and Company, USA

PCT Int. Appl., 186 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent

English

FAMILY ACC. NUM. COUNT:

PA	TENT	NO.			KIN	D :	DATE		;	APPL:	ICAT:	ION I	. 00		DATE			
WO	WO 2004094380 W: AE, AG, AI									WO 2	004-1	JS92	83		20040414			
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
	•	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	

```
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
                                 20041104
                                             AU 2004-232799
     AU 2004232799
                                                                     20040414
                          A1
                                 20041104
                                             CA 2004-2518839
                          A1
                                                                     20040414
     CA 2518839
                                             EP 2004-759769
                          Α1
                                 20060222
                                                                     20040414
     EP 1626958
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
                          A
                                             BR 2004-9211
     BR 2004009211
                                 20060328
                                                                     20040414
                                             CN 2004-80010411
                          Α
                                 20060524
     CN 1777584
                                                                     20040414
                                             JP 2006-509337
     JP 2006523692
                          T
                                 20061019
                                                                     20040414
     US 2006211734
                          A1
                                 20060921
                                             US 2005-552131
                                                                     20051011
                                             US 2003-464396P
PRIORITY APPLN. INFO.:
                                                                  Р
                                                                     20030418
                                             WO 2004-US9283
                                                                  Α
                                                                     20040414
                         MARPAT 141:395422
OTHER SOURCE(S):
GI
```

Ι

AB Title compds. I [wherein Q = O, S; X = CR4c, N; R1 = (un)substituted alkyl, cycloalkyl(alkyl), Ph, heterocyclyl; R2 = H, (fluoro)alkyl, cycloalkylalkyl, (un)substituted pyrazolyl(alkyl); R3 = H, alkyl; R4a, R4b, R4c = independently H, halo, (fluoro)alkyl; R5, R6 = independently H, (fluoro)alkyl; with the proviso that R6 = alkyl only when R5 ≠ H; and pharmaceutically acceptable acid addition salts thereof] were prepared by standard and solid phase combinatorial methods as 5-HT1F agonists. For example, amidation of [3-[(1-methylpiperidin-4-yl)oxy]phenyl]amine (preparation given) with benzoyl chloride afforded II (91%). In a radioligand binding assay using Ltk cells transfected with the human 5-HT1F receptor sequence, exemplified invention compds. exhibited high affinity for the receptor with Ki values of ≤ 150 nM. Thus, I and their pharmaceutical compns. are useful for activating 5-HT1F receptors, inhibiting neuronal protein extravasation, and treating or preventing migraine in mammals, especially humans (no data).

IT 790671-73-7P

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study);

CN

PREP (Preparation); USES (Uses)

(5-HT1F agonist; preparation of piperidinyl-substituted amides as 5-HT1F agonists for treatment of migraine)

RN 790671-73-7 CA

> 2-Thiophenecarboxamide, 3-chloro-N-[3-[(1-methyl-4piperidinyl)thio]phenyl] - (9CI) (CA INDEX NAME)

2 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER:

REFERENCE COUNT:

L12 ANSWER 18 OF 45 CA COPYRIGHT 2007 ACS on STN 141:314354 CA

TITLE:

Preparation of 2-Phenoxy- and 2-phenylsulfomamide derivatives with CCR3 antagonistic activity for the

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

treatment of asthma and other inflammatory or

immunological disorders

INVENTOR(S):

Li, Yingfu; Bacon, Kevin; Sugimoto, Hiromi; Fukushima, Keiko; Hashimoto, Kentaro; Marumo, Makiko; Moriwaki, Toshiya; Nunami, Noriko; Tsuno, Naoki; Urbahns, Klaus;

Yoshida, Nagahiro

PATENT ASSIGNEE(S):

Bayer Healthcare A.-G., Germany

SOURCE:

PCT Int. Appl., 93 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PAT	ENT	NO.			KIN	D :	DATE		i	APPL	ICAT	ION I	NO.		D	ATE	
WO	2004	0848	98		A1	_	2004	1007	1	WO 2	004-1	EP24:	96		2	0040	311
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	ΜX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	FI,	FR,	GB,	GR,	ΗU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,
		TD,	TG														
ΑU	2004	2248	07		A1	:	2004	1007	1	AU 2	004-3	2248	07		20	0040	311
CA	2520	225			A1	:	2004	1007	(CA 2	004-3	25202	225		20	040	311
ΕP	1608	374			A1		2005	1228]	EP 2	004-1	71938	89		20	040	311
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK
BR	2004	00868	82		Α	:	2006	0328	1	BR 2	004-8	3682			20	040	311
CN	1802	159			Α	:	20060	712	(CN 2	004-	30013	3585		20	040	311
JP	2006	52362	27		\mathbf{T}	:	2006:	1019		JP 2	006-9	50463	35		20	040	311
NO	2005	0048	78		Α		2005:	1021	1	NO 2	005-4	1878			20	0051	021

PRIORITY APPLN. INFO.:

EP 2003-6293 WO 2004-EP2496 20030324 20040311

W

OTHER SOURCE(S):

MARPAT 141:314354

GΙ

$$R^{1}$$
 R^{2}
 $R^{4}-S$
 R^{3}

AB Title compds. I [X = 0, S; R1 = H, halo, OH, NO2, etc.; R2 = H, halo, OH, NO2, CN, alkoxy, etc.; R3 = H, halo, OH, NO2, CN, etc.; R4 = amino, etc.] are prepared For instance, 5-cyano-2-(3,5-dichlorophenoxy)-N-(2-(dimethylamino)ethyl)-N-[2-(2,5-dioxopyrrolidin-1-yl)ethyl]benzenesulfonamide is prepared in 3 steps from N,N-dimethylethane-1,2-diamine, 5-cyano-2-(3,5-dichlorophenoxy)phenylsulfonyl chloride (preparation given) and pyrrolidine. Compds. of the invention exhibit 100 fold selectivity toward the CCR3 receptor compared to CCR1, CCR5, CCR7, CCR8 and CXCR1. I are useful in the treatment of diseases associated with CCR3 activity, e.g., asthma, atopic dermatitis, allergic rhinitis and other inflammatory/immunol. disorders.

IT 769159-61-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 2-Phenoxy- and 2-phenyl(heterocyclic)sulfonamide derivs. with CCR3 antagonistic activity for treatment of asthma and other inflammatory or immunol. disorders)

RN 769159-61-7 CA

CN

1-Piperidinecarboxylic acid, 4-[[5-cyano-2-(3,5-dichlorophenoxy)phenyl]thio]-, 1,1-dimethylethyl ester (9CI) (CA INDE: NAME)

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 19 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 141:243344 CA

TITLE: Preparation of 1-[(3-pyridinyl)carbonyl]pyrrolidine

derivatives as immunosuppressants

INVENTOR(S): Baxter, Andrew; Eyssade, Christine; Guile, Simon;

King, Sarah; Pimm, Austen; Reuberson, James; Thorne,

Philip

PATENT ASSIGNEE(S): AstraZeneca AB, Swed.

SOURCE:

PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

GI

English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.					KIND DATE			APPLICATION NO.						DATE				
WO	WO 2004074278					A1 20040902			WO 2004-SE216				20040218					
	W:	ΑE,	ΑE,	AG,	AL,	AL,	AM,	AM,	AM,	AT,	ΑT,	ΑU,	ΑZ,	ΑZ,	BA,	BB,	BG,	
		BG,	BR,	BR,	BW,	BY,	BY,	ΒZ,	ΒZ,	CA,	CH,	CN,	CN,	CO,	CO,	CR,	CR,	
		CU,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EC,	EC,	EE,	EE,	EG,	ES,	
		ES,	FI,	FI,	GB,	GD,	GE,	GE,	GH,	GM,	HR,	HR,	HU,	ΗU,	ID,	ΙL,	IN,	
		IS,	JP,	JP,	ΚE,	KE,	KG,	KG,	KP,	ΚP,	ΚP,	KR,	KR,	ΚZ,	ΚZ,	ΚZ,	LC,	
		LK,	LR,	LS,	LS,	LT,	LU,	LV,	MA,	MD,	MD,	MG,	MK,	MN,	MW,	MX,	MX,	
		ΜZ,	MZ,	NA,	NI			•										
.*	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	ΑT,	ВE,	
		BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	
		GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG									
PRIORITY APPLN. INFO.:					SE 2003-456						A 20030219							
OTHER SOURCE(S):					MARPAT 141:243344													

$$\begin{array}{c|c}
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\
 & & \\$$

10/500,517

The title compds. [I; A = 4-6 membered saturated ring; p = 1-2; R1 = H, alkyl, AB halo, NR4R5, X(alkyl); X = O, S, NR4; B = a bond, CH2, O, S, SO, SO2, NH; R2 = (un) substituted Ph, heteroaryl with one or more N atoms, (un) saturated bicyclic system containing one or more heteroatoms; R4, R5 = H, alkyl] and their pharmaceutically acceptable salts, were prepared E.g., a multi-step synthesis of II, was given. The compds. I were tested for inhibition of PMA/ionomycin-stimulated peripheral blood mononuclear cell proliferation (data were given for representative compds. I). Processes for the preparation of the compds. I together with pharmaceutical compns. containing them and their use in therapy in particular in the modulation of autoimmune disease are also described.

749899-06-7P TT

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 1-[(3-pyridinyl)carbonyl]pyrrolidine derivs. as immunosuppressants)

RN 749899-06-7 CA

Pyrrolidine, 1-[[6-[4-(phenylthio)-1-piperidinyl]-3-pyridinyl]carbonyl]-CN (9CI) (CA INDEX NAME)

REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L12 ANSWER 20 OF 45

ACCESSION NUMBER:

141:236618 CA

TITLE:

Inhibitors of hepatitis C virus, compositions and

treatments using the same

INVENTOR(S):

Duggal, Rohit; Patick, Amy Karen; Zhao, Weidong;

Herlihy, Koleen Jill; Sha, Eiann; Liu, Wei

PATENT ASSIGNEE(S):

SOURCE:

Pfizer Inc., USA

PCT Int. Appl., 48 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

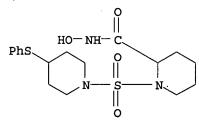
Patent

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004073599	· A2	20040902	WO 2004-IB403	20040206
WO 2004073599	. A3	20041223		

```
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
                                             CA 2004-2516328
     CA 2516328
                          A1
                                 20040902
                                                                     20040206
     EP 1596846
                                 20051123
                                             EP 2004-708837
                          A2
                                                                     20040206
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                                             BR 2004-7587
     BR 2004007587
                          Α
                                 20060214
                                                                     20040206
                          \mathbf{T}
     JP 2006517960
                                 20060803
                                             JP 2006-502443
                                                                     20040206
     US 2004229817
                          Α1
                                 20041118
                                             US 2004-782679
                                                                     20040218
PRIORITY APPLN. INFO.:
                                             US 2003-448253P
                                                                  P
                                                                    20030218
                                             WO 2004-IB403
                                                                  W
                                                                    20040206
OTHER SOURCE(S):
                         MARPAT 141:236618
     The invention relates to methods of inhibiting HCV viral replication
     activity comprising contacting an HCV polymerase with a therapeutically
     effective amount of a hydroxamate MMP inhibitor, and composition comprising the
     same.
IT
     210915-24-5
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (inhibitors of hepatitis C virus)
RN
     210915-24-5 CA
     2-Piperidinecarboxamide, N-hydroxy-1-[[4-(phenylthio)-1-
CN
     piperidinyl]sulfonyl]- (9CI) (CA INDEX NAME)
```



```
CA COPYRIGHT 2007 ACS on STN
L12 ANSWER 21 OF 45
ACCESSION NUMBER:
                         141:174180 CA
                         Preparation of 1,2,3-trisubstituted aryl and
TITLE:
                         heteroaryl derivatives, in particular pyrimidines, as
                         modulators, in particular agonists and inverse
                         agonists, of G-coupled protein receptor and their use
                         in the prophylaxis and treatment of metabolic disorder
                         such as diabetes and hyperglycemia
                         Jones, Robert M.; Semple, Graeme; Fioravanti, Beatriz;
INVENTOR(S):
                         Pereira, Guilherme; Calderon, Imelda; Uy, Jane;
                         Duvvuri, Kameshwari; Choi, Jin Sun Karoline; Xiong,
                         Yifeng; Dave, Vibha
PATENT ASSIGNEE(S):
                         Arena Pharmaceuticals Inc., USA
SOURCE:
                         PCT Int. Appl., 268 pp.
                         CODEN: PIXXD2
                         Patent
DOCUMENT TYPE:
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                         1
PATENT INFORMATION:
```

GI

PA	KIND DATE			APPLICATION NO.					_ :	DATE							
	2004065	380		A1					WO	20	04-1	JS12	67		:	20040	114
	W: AI Cl GI		AL, CR, GM,	AM, CU, HR,	AT CZ HU	AU, DE, ID,	AZ, DK, IL,	BA, DM, IN,	D2 IS	Z, S,	EC, JP,	EE, KE,	EG, KG,	ES, KP,	FI KR	GB,	GD,
UA	2004205	642	•	A1		2004	0805	·	AU	20	04-2	2056	42	•		20040	114
	2512899																
EP	1599468	}		A1		2005	1130		ΕP	20	04-	7022	48		:	20040	114
	R: AT		•			•		•		•	•	•				•	
		E, SI,	•	•		•	•	•		•	•	•	•	•			
	2004006						1220										
	2006516	5572		${f T}$		2006	0706										
•	1835943						0920						2203			20040	
	2005KN												50			20050	
ИО	2005003	803		Α		2005	1012		NO	20	05-3	3803			:	20050	811
US	2006217	1379		A1		2006	0928		US	20	06-5	5416	57		:	20060	303
PRIORITY	Y APPLN.	INFO	.:						US	20	03-4	4403	94 P		P :	20030	114
									US	20	03-4	1498:	29P		P :	20030	224
									US	20	03-4	1533	90P		P :	20030	306
									US	20	03-4	1708	75P		P :	20030	514
									WO	20	04-T	JS12	67	1	W :	20040	114
OTHER SO	OURCE (S)	:		MARI	TAS	141:	17418	30							•		

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [wherein A, B = independently hetero/alkylene optionally AB substituted with 1-4 Me groups; D = O, S, SO, SO2, CH2 and derivs., NH and derivs.; V = absent, (un) substituted alkylene, ethylene; W = absent, NH and derivs., O, S, SO, SO2; X, Y = N, CH and derivs.; Z = alkyl(thio)carboxamide, monoalkyl/dialkyl/amino, halo, hetero/aryl, heterocyclyl, NO2, tetrazolyl, acyloxy, alkoxy, (un)substituted alkyl, acyl, etc.; Ar1 = (un) substituted hetero/aryl; R1 = H, acyloxy, alk(en/yn)yl, alkoxy, alkylsulfonyl, CN, halo, OH, NH2, etc.; their pharmaceutically acceptable salts, hydrates and solvates] were prepared as modulators, in particular agonists and inverse agonists of G-coupled protein receptor (RUP3), for treating diabetes, hyperglycemia and other metabolic disorders. Eleven biol. examples are given. For example, II was prepared in two steps by amination of 2,6-dichloro-5-nitropyrimidine with piperidine-4-carboxylic acid Et ester, and etherification with 4-(imidazol-1-yl)phenol. III bound to RUP3 receptor with an IC50 = 0.05 μM in a membrane cyclase assay. RUP3 agonist III stimulates cAMP production in HIT-T14 cells at a level comparable to that seen in forskolin. Thus, I are useful in the prophylaxis or treatment of metabolic disorders and complications thereof, such as, diabetes and obesity. IT 733749-17-2P, 4-[(2-Methyl-5-trifluoromethyl-2H-pyrazol-3-yl)oxy]-5-nitro-6-(4-phenylsulfanylpiperidin-1-yl)pyrimidine

5-nitro-6-(4-phenylsulfanylpiperidin-1-yl)pyrimidine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of 1,2,3-trisubstituted aryl and heteroaryl derivs., in particular pyrimidines, as modulators of G-coupled protein receptor and their use in the treatment of diabetes, hyperglycemia and

related diseases)

733749-17-2 CA RN

Pyrimidine, 4-[[1-methyl-3-(trifluoromethyl)-1H-pyrazol-5-yl]oxy]-5-nitro-CN6-[4-(phenylthio)-1-piperidinyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS 25 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L12 ANSWER 22 OF 45

ACCESSION NUMBER:

141:23903 CA

TITLE:

Preparation of indole amino acid derivatives as

somatostatin agonists or antagonists

INVENTOR(S):

Abe, Hidenori; Matsunaga, Shinichiro; Takekawa, Shiro;

Watanabe, Masanori

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 482 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

		APPLICATION NO.	
WO 2004046107 WO 2004046107	A1 20040603	WO 2003-JP14622	
W: AE, AG, AL, CN, CO, CR, GE, GH, GM, LR, LS, LT, OM, PG, PH, TN, TR, TT,	AM, AT, AU, AZ, CU, CZ, DE, DK, HR, HU, ID, IL, LU, LV, MA, MD, PL, PT, RO, RU, TZ, UA, UG, US,	BA, BB, BG, BR, BW, DM, DZ, EC, EE, EG, IN, IS, JP, KE, KG, MG, MK, MN, MW, MX, SC, SD, SE, SG, SK, UZ, VC, VN, YU, ZA,	ES, FI, GB, GD, KR, KZ, LC, LK, MZ, NI, NO, NZ, SL, SY, TJ, TM, ZM, ZW
BY, KG, KZ, ES, FI, FR, TR, BF, BJ, CA 2506735	MD, RU, TJ, TM, GB, GR, HU, IE, CF, CG, CI, CM, A1 20040603	SD, SL, SZ, TZ, UG, AT, BE, BG, CH, CY, IT, LU, MC, NL, PT, GA, GN, GQ, GW, ML, CA 2003-2506735	CZ, DE, DK, EE, RO, SE, SI, SK, MR, NE, SN, TD, TG 20031118
JP 2004300133	A 20041028	AU 2003-280838 JP 2003-388524 EP 2003-772841	20031118
IE, SI, LT	LV, FI, RO, MK, A 20060222 A1 20061005	GB, GR, IT, LI, LU, CY, AL, TR, BG, CZ, CN 2003-80108633 US 2005-534725 JP 2002-335661 JP 2003-76435 WO 2003-JP14622	EE, HU, SK 20031118 20050512 A 20021119 A 20030319
OTHER SOURCE(S):	MARPAT 141:2390		

GI

The invention relates to compds. Z-Y-N(Ya-Za)CH(CR4R5R6)CONR3-A-B-NR1R2 [A is an aromatic ring optionally having substituents; B, Y and Ya are a bond or spacer; R1, R2 are H, (un)substituted hydrocarbyl or heterocyclyl or R1R2N is a ring or forms a ring with ring A; R3 is H, (un)substituted hydrocarbyl or heterocyclyl; R4, R5 are H or (un)substituted hydrocarbyl or form a ring; R6 is (un)substituted indolyl; Z, Za are H, halo or a cyclic group] or their salts or prodrugs having somatostatin receptor binding inhibition activity. Thus, 2-aminobutanamide derivative I was prepared via amidation of (2R,3S)-3-(1H-indol-3-yl)-2-[[(4-phenyl-1-piperidinyl)carbonyl]amino]butanoic acid with 3-[(dimethylamino)methyl]aniline dihydrochloride.

IT 697307-39-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indole amino acid derivs. as somatostatin agonists or antagonists)

RN 697307-39-4 CA

CN 1H-Indole-3-propanamide, N-[3-[(dimethylamino)methyl]phenyl]- α -[[[4-[(4-fluorophenyl)thio]-1-piperidinyl]carbonyl]amino]- β -methyl-, (α R, β S)- (9CI) (CA INDEX NAME)

Ι

Absolute stereochemistry.

CA COPYRIGHT 2007 ACS on STN L12 ANSWER 23 OF 45

ACCESSION NUMBER:

140:357387 CA

TITLE:

Preparation of 2,3-dihydro-6-nitroimidazo[2,1-

b]oxazoles as antibacterial agents

INVENTOR(S):

Tsubouchi, Hidetsugu; Sasaki, Hirofumi; Kuroda, Hideaki; Itotani, Motohiro; Hasegawa, Takeshi; Haraguchi, Yoshikazu; Kuroda, Takeshi; Matsuzaki, Takayuki; Tai, Kuninori; Komatsu, Makoto; Matsumoto, Makoto; Hashizume, Hiroyuki; Tomishige, Tatsuo; Seike, Yuji; Kawasaki, Masanori; Sumida, Takumi; Miyamura,

Shin

PATENT ASSIGNEE(S):

Otsuka Pharmaceutical Co., Ltd., Japan

PCT Int. Appl., 1084 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.						KIND DATE			APPLICATION NO.						DATE		
WO	2004	0334	63		A1	_	2004	0422		WO	2003 <i>-</i>	JP13	070		2	0031	010
	W:	•	•	BY,	CA,	CN	EG,	ID,	IN,	KR	, MX,	PH,	PL,	RU,	SG,	UA,	US,
	RW:	VN, AT,		BG,	CH,	CY	CZ,	DE,	DK,	EE	, ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
											, TR						
CA	2497	569			A1		2004	0422		CA	2003-	2497	569		2	0031	010
AU	2003	2729	79		A1		2004	0504		ΑU	2003-	2729	79		2	0031	010
BR	2003	01434	44		Α		2005	0712		BR	2003-	1434	4		2	0031	010
EP	1555	267			A1		2005	0720		EΡ	2003-	7540	85		2	0031	010
	R:	AT,	BE,	CH,	DE,	DK	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	FI,	RO,	CY	TR,	BG,	CZ,	EE	, HU,	SK					
CN	1705	670	-		Α		2005	1207		CN	2003-	8010	1750		2	0031	010
JP	2004	1495	27		Α		2004	0527		JР	2003-	3538	68		2	0031	014
	2006							0504		US	2005-	5304	29		2	0050	406
	2005				Α			0818		IN	2005-	KN60	0		2	0050	408
PRIORIT	Y APP	LN.	INFO	. :						JP	2002-	2982	59	7	A 2	0021	011
											2003-					0031	
OTHER S	OURCE	(S):			MAR	PAT	140:	3573		-							

OTHER SOURCE(S):

GI

$$O_2N$$
 O_2N
 O_2N

AB The title compds. [I; wherein R1 = H, C1-6 alkyl; n = an integer of 0-6; R2 = OR3, SR5, CO2R6, O2CNR7R8, Q, NR19R20, Q1; wherein R3 = H, C1-6 alkoxy, C1-6 alkoxy-C1-6 alkyl, (un)substituted phenyl-C1-6 alkoxy, biphenylyl-C1-6 alkoxy, phenyl-C2-6 alkenyl, C1-6 alkylsulfonyl, etc.; R5 = tetrazolyl or phenyltetrazolyl optionally substituted by halo or C1-6 alkyl on phenyl; R6 = C1-6 alkyl; R7, R8 = H, C1-8 alkyl, halo-C1-6 alkyl, C1-6 alkoxycarbonyl-C1-6 alkyl, C3-8 cycloalkyl, phenyl-C1-6 alkyl, Ph, naphthyl, pyridyl, etc.; X = halo, amino-C1-6 alkyl, C1-6 alkylamino-C1-6 alkyl; R11 = H, C1-6 alkyl, halo-C1-6 alkyl, C1-6 alkoxy, halo-C1-6 alkoxy, etc.; m = an integer of 0-3; R40 = C1-6 alkyl, Ph, halophenyl; or R1 and -(CH2)nR2 may be united via a nitrogen atom to form together with the adjacent carbon atom a spiro ring represented by the general formula Q2; wherein R41 = H, C1-6 alkyl, phenyl-C1-6 alkyl, biphenylyl-C1-6 alkyl, (un) substituted Ph, etc.] are prepared These compds. exhibit excellent bactericidal activity against Tubercle bacillus, multiple drug resistant T. bacillus, and atypical acid-fast bacteria, and are useful as antitubercular agents. Thus, 0.43 g (S)-1-(2-chloro-4-nitroimidazol-1-yl)-2-methyl-3-[4-(4-trifluoromethoxyphenyl)piperazin-1-yl]propan-2-ol and 0.22 g 2-chloro-4-nitro-1H-imidazole were suspended in 4 mL MeCN, treated with 0.17 g NaHCO3, and refluxed for 9 h to give 31% (S)-1-(2-chloro-4nitroimidazol-1-yl)-2-methyl-3-[4-(4-trifluoromethoxyphenyl)piperazin-1yl]propan-1-ol which (5.85 g) was dissolved in 150 mL THF, treated with 0.66 g NaH under ice-cooling and refluxed for 6 h to give 48% (S)-2-[[4-(4-trifluoromethoxyphenyl)piperazin-1-yl]methyl]-2-methyl-6nitro-2,3-dihydroimidazo[2,1-b]oxazole (II). II showed min. inhibitory concentration of 0.024 µg/mL against Mycobacterium tuberculosis H37Rv. IT 681493-63-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2,3-dihydro-6-nitroimidazo[2,1-b]oxazoles as antibacterial agents and antitubercular agents)

RN 681493-63-0 CA

CN Imidazo[2,1-b]oxazole, 2,3-dihydro-2-methyl-6-nitro-2-[[4-[[4-(trifluoromethoxy)phenyl]thio]-1-piperidinyl]methyl]-, (2S)- (9CI) (CINDEX NAME)

Absolute stereochemistry.

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 11 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L12 ANSWER 24 OF 45

ACCESSION NUMBER: 140:303539 CA

Preparation of cyclic amine compounds as chemokine TITLE:

receptor antagonists useful in treatment of AIDS

INVENTOR(S): Sugihara, Yoshihiro; Nishikawa, Yoichi; Kanzaki,

Naoyuki; Iizawa, Yuji; Baba, Masanori Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 155 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
WC	WO 2004026833					A1 20040401			WO 2003-JP11906					20030918				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GΕ,	
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NI,	NO,	NZ,	OM,	
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	ΚZ,	MD,	RU,	ŤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
AU	2003	2665:	28		A1		2004	0408		AU 2	003-2	26652	28		2	0030	918	
JP	2004	1315	01 ·		Α		2004	0430		JP 2	003-3	3288	54		2	0030	919	
PRIORITY APPLN. INFO.:									JP 2	002-2	2755.	34	i	A 2	0020	920		
									1	WO 2	،- 300	JP11:	906	1	W 2	0030	918	

OTHER SOURCE(S):

MARPAT 140:303539

GI

$$Q^1$$
 N
 Q^3
 Q^3

The title compds. I [Q1 and Q2 each represents C1-3 alkyl; Q3 represents AB halogeno; X represents CH2 or SO2; and R represents SO2NR1R2, etc. (when X is CH2) and represents C1-8 alkyl, etc. when X is SO2; R1, R2 = H, (un) substituted alkyl; or NR1R2 forms N-containing heterocyclic ring] are prepared The CCR5 antagonist activity of compds. of this invention was demonstrated. A process for preparing I is disclosed. Formulations are given.

Ι

101798-66-7P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cyclic amine compds. as chemokine receptor antagonists useful in treatment of AIDS)

RN 101798-66-7 CA

CN Piperidine, 4-(phenylthio)-, hydrochloride (9CI) (CA INDEX NAME)



HCl

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 25 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

140:235738 CA

TITLE:

Preparation of pyrazolopyrimidines as calcium receptor

modulators

INVENTOR (S):

Yasuma, Tsuneo; Mori, Akira; Kawase, Masahiro; Kimura,

Hiroyuki; Yoshida, Masato; Gyorkos, Albert Charles;

Pratt, Scott Alan; Corrette, Christopher Peter Takeda Chemical Industries, Ltd., Japan; Takeda

Pharmaceutical Company Limited

SOURCE:

PCT Int. Appl., 460 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PA'	rent :	NO. KIND DATE APPLICATION NO.							DATE								
										-							
WO 2004017908				A2		2004	0304	WO 2003-US26317						20030821			
WO	2004	0179	80		A3		2006	0105									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	PG,
							SC,										
		TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
	RW:						MZ,							ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HÚ,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
CA	2494	700			A1		2004	0304		CA 2	003-	2494	700		2	0030	821
ΑU	2003	2655	85		A1		2004	0311		AU 2	003-	2655	85		2	0030	821
ΕP	1572	113			A2		2005	0914		EP 2	003-	7932	73		2	0030	821
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
					-		RO,	•		•	•	•	•	•	-		•
JΡ	2006																821
	1771																
CIA	T / / T	2 J I			4.7		2000	0210		CTA 5	003-	J Z J J.	. .		2	0000	U2 I

US 2006079536	A1	20060413	US	2005-525158		20050222
IN 2005KN00280	Α	20060818	IN	2005-KN280		20050225
NO 2005001328	Α	20050315	NO	2005-1328		20050315
PRIORITY APPLN. INFO.:			US	2002-406012P	P	20020826
		,	US	2003-466129P	P	20030428
			WO	2003-US26317	W	20030821

OTHER SOURCE(S): GI

MARPAT 140:235738

$$R^9$$
 R^{10}
 X^3
 Y
 Ar
 R^1
 R^3
 R^3

The title compds. [I; ring A = (un) substituted 5-7 membered ring; ring B = AB (un) substituted 5-7 membered heterocyclic ring; X1 = (un) substituted CH, CH2, N or NH; X2 = N or (un)substituted NH; Y = C, (un)substituted CH or N; Z = (un)substituted CH, CH2, N or NH; Ar = (un)substituted cyclic group; R = H, (un) substituted alkyl, etc.; and their salts], useful as calcium receptor modulators, were provided. The compds. II, III [wherein ring A = (un)substituted 5-7 membered ring; Q = C, CR5 (R5 = H, alkyl, hydroxyalkyl, etc.), or N; X1 = CR1 (R1 = H, alkyl, hydroxyalkyl, etc.), CR1R2 (R1 as above; R2 = H, heterocyclyl, etc.); R3 = H, alkyl, hydroxyalkyl, aminoalkyl, etc.; Y = C, CR4 (R4 = H, alkyl, hydroxyalkyl, etc.), or N; R8-R12 = H, (un) substituted alkyl, etc.; X3 = a bond, O, (un)oxidized S, N, (un)substituted NH, C1-2 alkylene; or their salts], were also provided. Thus, reacting amidation of the acid IV [R = H] with 4-(F3C)C6H4C(Et)2NH2 afforded 31% IV [R = 4-(F3C)C6H4C(Et)2NH]. Biol. data were given for selected compds. The pharmaceutical composition comprising the compound I is claimed.

IT 667928-59-8P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of pyrazolopyrimidines as calcium receptor modulators) 667928-59-8 CA

Piperidine, 4-(phenylthio)-1-[(4,5,6,7-tetrahydro-7,7-dimethyl-5-CN phenylpyrazolo[1,5-a]pyrimidin-3-yl)carbonyl] - (9CI) (CA INDEX NAME)

RN

L12 ANSWER 26 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 140:157213 CA

TITLE: Exploring the molecular basis of selectivity in A1

adenosine receptors agonists: a case study

AUTHOR(S): Giordanetto, Fabrizio; Fossa, Paola; Menozzi, Giulia;

Schenone, Silvia; Bondavalli, Francesco; Ranise,

Angelo; Mosti, Luisa

CORPORATE SOURCE: Department of Chemistry, Centre for Computational

Science, Queen Mary University of London, London, El

4NS, UK

SOURCE: Journal of Computer-Aided Molecular Design (2003),

17(1), 39-51

CODEN: JCADEQ; ISSN: 0920-654X

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal LANGUAGE: English

Adenosine is a naturally occurring purine nucleoside that has a wide variety of well-documented regulatory functions and physiol. roles. Selective activation of the adenosine A1 receptor has drawn attention in drug discovery for the therapeutic effects on neural and cardiovascular disorders. We have developed a model of the human A1 adenosine receptor using bovine rhodopsin as a template. A flexible docking approach has been subsequently carried out for evaluating the mol. interactions of twenty-one selective A1 agonists with the receptor model. The results of these studies are consistent with mutational and biochem. data. In particular, they highlight a wide hydrogen-bonding network between the nucleoside portion of the ligands and the A1 receptor as well as key amino acids for hydrophobic interactions with the different N6-groups of the agonists. The models presented here provide a detailed mol. map for the selective stimulation of the adenosine A1 receptor subtype and a steady basis for the rational design of new A1 selective ligands.

IT 169190-51-6, NNC 210147

RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)

(mol. basis of selectivity in Al adenosine receptors agonists using flexible docking approach)

RN 169190-51-6 CA

CN Adenosine, 2,5'-dichloro-5'-deoxy-N-[4-(phenylthio)-1-piperidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 27 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

139:292164 CA

TITLE: .

Preparation of phenanthridinones as PARP inhibitors

INVENTOR(S): Yama

Yamamoto, Hirofumi; Mukoyoshi, Koichiro; Hattori,

Kouji

PATENT ASSIGNEE(S):

Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2003080581	A1 20031002	WO 2003-JP3579				
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,			
CO, CR, CU,	CZ, DE, DK, DM,	DZ, EC, EE, ES, FI,	GB, GD, GE, GH,			
GM, HR, HU,	ID, IL, IN, IS,	JP, KE, KG, KP, KR,	KZ, LC, LK, LR,			
LS, LT, LU,	LV, MA, MD, MG,	MK, MN, MW, MX, MZ,	NI, NO, NZ, OM,			
PH, PL; PT,	RO, RU, SC, SD,	SE, SG, SK, SL, TJ,	TM, TN, TR, TT,			
TZ, UA, UG,	US, UZ, VC, VN,	YU, ZA, ZM, ZW				
RW: GH, GM, KE,	LS, MW, MZ, SD,	SL, SZ, TZ, UG, ZM,	ZW, AM, AZ, BY,			
KG, KZ, MD,	RU, TJ, TM, AT,	BE, BG, CH, CY, CZ,	DE, DK, EE, ES,			
FI, FR, GB,	GR, HU, IE, IT,	LU, MC, NL, PT, RO,	SE, SI, SK, TR,			
BF, BJ, CF,	CG, CI, CM, GA,	GN, GQ, GW, ML, MR,	NE, SN, TD, TG			
CA 2480384	A1 20031002	CA 2003-2480384	20030325			
AU 2003217491	A1 20031008	AU 2003-217491	20030325			
EP 1487800	A1 20041222	EP 2003-712891	20030325			
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,			
IE, SI, LT,	LV, FI, RO, MK,	CY, AL, TR, BG, CZ,	EE, HU, SK			
JP 2005521698	T 20050721	JP 2003-578336	20030325			
		US 2003-508004				
PRIORITY APPLN. INFO.:		AU 2002-1374	A 20020326			
•		WO 2003-JP3579	W 20030325			
OTHER SOURCE(S):	MARPAT 139:2921	64				

$$R^{1}$$
 A
 NH
 $Y_{n}-(CH_{2})_{m}R^{2}$
 I

The compds. I or its prodrug, or their salt are claimed (ring A is a carbocyclic group, R1 = H or a halogen atom or a lower alkyl group, R2 = di(lower)alkylamino group or N-containing heterocyclic group, among which the N-containing heterocyclic group may be substituted with one or more substituent(s), Y = O or S, n = 0-2, and m = 0-4).which has poly(adenosine 5'-diphosphoribose)polymerase (PARP) inhibiting activity. For example, 4-(4-fluorophenyl)-1,2,3,6-tetrahydropyridine hydrochloride was added to a solution of 2-(3-bromophenyl)-6(5H)-phenanthridinone in DMF in presence of Et3N to give 2-{3-[4-(4-fluorophenyl)-3,6-dihydro-1(2H)-pyridyl]propyl}-6(5H)-phenanthridinone. These phenanthridinones have pharmaceutical use.

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of phenanthridinones as PARP inhibitors)

RN 608126-45-0 CA

CN

6(5H)-Phenanthridinone, 7,8,9,10-tetrahydro-3-[[4-(phenylthio)-1-piperidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 28 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

139:149532 CA

TITLE:

Preparation of thio-bridged aryl substituted azacyclic derivatives for use in pharmaceutical compositions as

modulators of acetylcholine receptors

INVENTOR(S):

Astles, Peter Charles; Baker, Stephen Richard; Bonnefous, Celine; Vernier, Jean Michel; Keenan,

Martine; Sanderson, Adam Jan

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. PATENT NO. KIND DATE DATE --------------------------20030731 WO 2003062224 WO 2002-US21297 20020729 Α1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, ÚG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 2002-756389 20041020 20020729 **A1** AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK US 2004-500517 A1 20050331 US 2005070520 20040629 US 2002-350150P P PRIORITY APPLN. INFO.: 20020117 WO 2002-US21297 W 20020729

OTHER SOURCE(S):

MARPAT 139:149532

GΙ

Arylthio substituted azacyclic compds., such as A-S-B [A = azacyclic, such AΒ as 4-piperidinyl, 3-pyrrolidinyl, or 4-azepanyl; B = aryl, heteroaryl], were prepared for therapeutic uses that require modulation of neurotransmission by promoting the release of neurotransmitters such as acetylcholine, dopamine and norepinephrine and are useful for the treatment of disorders of the central and autonomic nervous systems. More particularly, the present invention relates to thio-bridged aryl compds. that are capable of modulating acetylcholine receptors and pharmaceutical compns. comprising such compds. Thus, the trifluoroacetate salt of 4-(4-hydroxyphenylthio)piperidine I (R = H) was prepared via a substitution reaction of 1-(tert-butoxycarbonyl)-4-methanesulfonyloxypiperidine with 4-mercaptophenol using NaH in THF and DMF and subsequent deprotection/salt formation of the N-BOC protected intermediate using TFA. I (R = cyclopropanylmethyl) was then prepared by reacting cyclopropanecarboxaldehyde with I.TFA (R = H) using MP-carbonate resin and 1% AcOH/DMF followed by treatment with triacetoxyborohydride and 1% AcOH/DMF. Effects of the prepared azacyclics on nicotine receptor β4 subtypes were determined using a functional Ca-flux assay. 569660-16-8P, 4-(4-Hydroxyphenylthio)piperidine trifluoroacetate IT RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic

CN

preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of thio-bridged aryl substituted azacyclic derivs. for use in pharmaceutical compns. as modulators of acetylcholine receptors)

RN 569660-16-8 CA

> Phenol, 4-(4-piperidinylthio)-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 569660-15-7 CMF C11 H15 N O S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L12 ANSWER 29 OF 45

5

ACCESSION NUMBER:

REFERENCE COUNT:

TITLE:

138:338143 CA

Preparation of dual action bactericides comprising a

oxazolidinone and a quinolone or naphthyridinone

moiety effective against multi-drug resistant bacteria

INVENTOR(S): Hubschwerlen, Christian; Specklin, Jean-Luc Morphochem Aktiengesellschaft fuer Kombinatorische

PATENT ASSIGNEE(S):

Chemie, Germany PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2003032962 WO 2003032962	A2 20030424 A3 20030717		20021004
W: AE, AG, AL	, AM, AT, AU, AZ,	BA, BB, BG, BR, BY, B	
GM, HR, HU	, ID, IL, IN, IS,	DZ, EC, EE, ES, FI, C JP, KE, KG, KP, KR, F MK, MN, MW, MX, MZ, N	KZ, LC, LK, LR,

```
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                 20030424
                                             CA 2002-2460572
     CA 2460572
                          A1
                                                                     20021004
                                 20040630
                                             EP 2002-796533
     EP 1432705
                           A2
                                                                     20021004
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
         R:
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     BR 2002013063
                          Α
                                 20040928
                                             BR 2002-13063
                                                                     20021004
     HU 200402126
                                 20050228
                                             HU 2004-2126
                           A2
                                                                     20021004
                           A1
                                 20050505
                                             US 2003-491519
     US 2005096343
                                                                     20021004
     CN 1630655
                           Α
                                 20050622
                                             CN 2002-819724
                                                                     20021004
     JP 2005529061
                           Т
                                 20050929
                                             JP 2003-535766
                                                                     20021004
     NZ 531879
                          Α
                                 20051028
                                             NZ 2002-531879
                                                                     20021004
     IN 2004MN00158
                          Α
                                 20050218
                                             IN 2004-MN158
                                                                     20040304
     ZA 2004001909
                           Α
                                 20050309
                                             ZA 2004-1909
                                                                     20040309
PRIORITY APPLN. INFO.:
                                             US 2001-327162P
                                                                     20011004
                                             WO 2002-EP11163
                                                                  W
                                                                     20021004
OTHER SOURCE(S):
                         MARPAT 138:338143
```

GΙ

AB The present invention relates to compds. of the Formula (I) that are useful antimicrobial agents and effective against a variety of multi-drug resistant bacteria. The present invention relates to oxazolidinones having a quinolone or naphthyridinone moiety (shown as I; variables defined below; e.g. 7-[4-[4-[(5S)-5-(acetylaminomethyl)-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-

dihydroquinoline-3-carboxylic acid (shown as II)) that are useful antibacterial agents and effective against a variety of multi-drug resistant bacteria. For I: A is a bond, NH, O, S, SO, SO2, SO2NH, PO4, -NH-CO-NH-, -CO-NH-, -CO-, -CO-O-, -NH-CO-O-, alkylene, alkenylene, alkynylene, heteroalkylene, arylene, heteroarylene, cycloalkylene, heterocycloalkylene, alkylarylene or heteroarylalkylene or a combination of two or more of these atoms or groups. X is CR5 or N; Y is CR6 or N; U is F or Cl; n = 0-3; R1 is H, F, Cl, Br, I, OH, NH2, alkyl or heteroalkyl; R2 is H, F or Cl; R3 is H, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R4 is heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R5 is H, F, C1, OH, NH2, alkyl or heteroalkyl, or R3 and R5 can be linked via an alkylene, an alkenylene or heteroalkylene or be a part of a cycloalkylene or heterocycloalkylene group, in which case R3 is not H and R5 is not H, F, OH, NH2 or Cl; R6 is H, F, Cl or OMe. Although the methods of preparation are not claimed, 30 example prepns. are included; the examples of this patent and many of the claims are the same as those of WO 03/031443 A1. All examples were tested against several gram pos. and gram neg. bacteria; typical MIC ranges (mg/L) are: S. aureus (MRSA: 0.125-2; MSSA: 0.06-1), E. faecalis $(\leq 0.03-1)$, E. faecium $(\leq 0.03-1)$, and S. pneumoniae $(\leq 0.03-1)$. They all have a broader and more pronounced activity than the corresponding quinolone and oxazolidinone as well as a 1+1 combination of these two compds.

(drug candidate; preparation of dual action bactericides comprising oxazolidinone and quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria)

RN 510729-82-5 CA

CN 3-Quinolinecarboxylic acid, 7-[4-[[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]thio]-1-piperidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L12 ANSWER 30 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

138:321016 CA

TITLE:

Preparation of aromatic sulfone hydroxamic acids and

their use as protease inhibitors

INVENTOR(S):

Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.;

Boehm, Terri L.; Carroll, Jeffery N.; Decrescenzo,

```
Gary A.; Fobian, Yvette M.; Freskos, John N.; Getman,
Daniel P.; McDonald, Joseph J.; Li, Madeleine H.;
Hockerman, Susan L.; Howard, Carol Pearcy; Kolodziej,
Steve A.; Mischke, Deborah A.; Rico, Joseph G.;
Stehle, Nathan W.; Tollefson, Michael B.; Vernier,
William F.; Villamil, Clara I.; Kassab, Darren J.
Pharmacia Corp., USA
U.S. Pat. Appl. Publ., 99 pp., Cont. of U.S. Ser. No.
570,731.
```

PATENT ASSIGNEE(S):

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

				KIND DATE					APPLICATION NO.					D.	ATE		
ບຣ	2003	 0737			A1		2003	0417							2	0011	121
US	6683	093			B2		2004	0127									
US	6750	228			B1		2004	0615		US 2	000-	5707	31		2	0000	512
CA	2467	565									002-						
WO	2003	0459	44		A1		2003	0605		WO 2	2002-	US37	093		2	0021	119
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
											KG,						
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM.	TN.	TR.	TT.	TZ.
							YU,				•	•	•	•	•	•	•
	RW:										TZ,	UG,	ZM,	ZW,	AM.	AZ.	BY.
											CH,						-
		-	-	•							PT,	•	•	•	•	•	•
											NE,		-	-		,	,
AU	2002															0021	119
					A1 20030610 A 20040914												
						1 20041103 EP 2002-789							-				
							EF 2002-789749										
											TR,					110,7	,
.TP	2005															0021	110
	2004																
PRIORIT	Y ADD	I.N	INFO				2001	1021			000-						
INTOKII	PRIORITY APPLN. INFO.:									וופ 1	.997-	5 7 0 7 . 5 6 0 0 '	7 D	1	D 10	0000	114
											.998-						
											.998-:						
•									US 1999-256948 US 1999-311837								
											001-						
OTHER C	משמוני	(C)			MADI	- N ETI	120	22101		WO 2	002-1	JS371	193	,	N 20	0021.	119
OTHER S	JUKCE	(5):			MARI	ARPAT 138:321016											

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [Z = C(O), O, S, NR6, etc.; R6 = H, CHO, sulfonyl, etc.; E = bond, C(O), S; Y = H, alkyl, alkoxy, haloalkyl, aryl, etc.; R = H, CN, perfluoroalkyl, trifluoromethoxy, etc.] are prepared For instance, Me chloroacetate is reacted with p-fluorothiophenol and the resulting sulfide oxidized to the sulfone (MeOHaq, Oxone), reacted with bis(2-

10/500,517

TТ

RN

CN

bromoethyl)ether (DMAC, K2CO3, DMAP, Bu4NBr), saponified (THF, KOTMS) and coupled to a solid support to give II [P = polymer support]. II is reacted with Et isonipecotate (NMP, 80°, 65 h), the product saponified (dioxane, KOH), coupled with 3,5-dimethylpiperidine and released from the resin to give hydroxamic acid III. Example compds. are tested for inhibition of MMP-13, MMP-2 and MMP-1. I are useful for disorders associated with MMP and/or aggrecanase activity.

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(aromatic sulfone hydroxamic acids and their use as protease inhibitors) 308825-68-5 CA

4-Piperidinecarboxamide, 1-cyclopropyl-N-hydroxy-4-[[4-[4-(phenylthio)-1-piperidinyl]phenyl]sulfonyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

L12 ANSWER 31 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

138:304289 CA

TITLE:

Preparation of dual action bactericides comprising a oxazolidinone and a quinolone or naphthyridinone

moiety effective against multi-drug resistant bacteria

Hubschwerlen, Christian; Specklin, Jean-Luc

INVENTOR(S):
PATENT ASSIGNEE(S):

Morphochem Aktiengesellschaft fuer Kombinatorische

Chemie, Germany

SOURCE:

PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

יאמ	ייייאיייי י	NIO			VIN	IND DATE				ז חחד	TONE		ъ.	7 mm			
PA.	TENT.	NO.			VTIM	,	DAID			APPL	ICAT.	TON 1	NO.		וע	AIL	
						-									-		
WO	2003	0314	43		A1	:	2003	0417	1	WO 2	002-	EP10	766		2	0020	925
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
	•	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
	GM, HR, HU, I				ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV, MA, MD, MG,				MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
	PL, PT, RO, RU, SD, SE, SG,				SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,				
			-	-	UΖ,	-	•										
	RW:															ΑZ,	
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
							2 CN 2002-819724										
ZA	ZA 2004001909					:	2005	0309		ZA 2	004-		20	0040	309		

PRIORITY APPLN. INFO.:

US 2001-327162P

20011004

OTHER SOURCE(S): MARPAT 138:304289

GΙ

$$V_{R4}$$
 V_{R4}
 V_{R4}
 V_{R3}
 V_{R3}
 V_{R3}
 V_{R4}
 V

AB The present invention relates to oxazolidinones having a quinolone or naphthyridinone moiety (shown as I; variables defined below; e.g. 7-[4-[4-[(5S)-5-(acetylaminomethyl)-2-oxooxazolidin-3-yl]-2fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4dihydroquinoline-3-carboxylic acid (shown as II)) that are useful antibacterial agents and effective against a variety of multi-drug resistant bacteria. For I: A is a bond, NH, O, S, SO, SO2, SO2NH, PO4, -NH-CO-NH-, -CO-NH-, -CO-, -CO-O-, -NH-CO-O-, alkylene, alkenylene, alkynylene, heteroalkylene, arylene, heteroarylene, cycloalkylene, heterocycloalkylene, alkylarylene or heteroarylalkylene or a combination of two or more of these atoms or groups. X is CR5 or N; Y is CR6 or N; U is F or Cl; n = 0-3; R1 is H, F, Cl, Br, I, OH, NH2, alkyl or heteroalkyl; R2 is H, F or Cl; R3 is H, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R4 is heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R5 is H, F, Cl, OH, NH2, alkyl or heteroalkyl, or R3 and R5 can be linked via an alkylene, an alkenylene or heteroalkylene or be a part of a cycloalkylene or heterocycloalkylene group, in which case R3 is not H and R5 is not H, F, OH, NH2 or Cl; R6 is H, F, Cl or OMe. Although the methods of preparation are not claimed, 30 example prepns. are included. All examples were tested against several gram pos. and gram neg. bacteria; typical MIC ranges (mg/L) are: S. aureus (MRSA: 0.125-2; MSSA: 0.06-1), E. faecalis (≤0.03-1), E. faecium $(\leq 0.03-1)$, and S. pneumoniae $(\leq 0.03-1)$. They all have a broader and more pronounced activity than the corresponding quinolone and

oxazolidinone as well as a 1+1 combination of these two compds. 510729-82-5P, 7-[4-[[4-[(5S)-5-[(Acetylamino)methyl]-2-IT oxooxazolidin-3-yl]-2-fluorophenyl]sulfanyl]piperidin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(drug candidate; preparation of dual action bactericides comprising oxazolidinone and quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria)

RN 510729-82-5 CA

3-Quinolinecarboxylic acid, 7-[4-[[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-CN oxazolidinyl]-2-fluorophenyl]thio]-1-piperidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFÉRENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L12 ANSWER 32 OF 45

ACCESSION NUMBER:

TITLE:

138:304288 CA

Preparation of dual action bactericides comprising a oxazolidinone and a quinolone or naphthyridinone

Morphochem Aktiengesellschaft fuer Kombinatorische

moiety effective against multi-drug resistant bacteria

INVENTOR(S): Hubschwerlen, Christian; Specklin, Jean-Luc

PATENT ASSIGNEE(S):

Chemie, Germany

PCT Int. Appl., 95 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

SOURCE:

Patent

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003031441	A1	20030417	WO 2002-EP10765	20020925
W: AE, AG,	AL, AM, AT,	AU, AZ, B	A, BB, BG, BR, BY, B	Z, CA, CH, CN,
CO, CR,	CU, CZ, DE,	DK, DM, D	Z, EC, EE, ES, FI, G	B, GD, GE, GH,
GM, HR,	HU, ID, IL,	IN, IS, J	P, KE, KG, KP, KR, K	Z, LC, LK, LR,
LS, LT,	LU, LV, MA,	MD, MG, M	IK, MN, MW, MX, MZ, N	O, NZ, OM, PH,
PL, PT,	RO, RU, SD,	SE, SG, S	SI, SK, SL, TJ, TM, T	N, TR, TT, TZ,
UA, UG,	US, UZ, VN,	YU, ZA, Z	M, ZW	
RW: GH, GM,	KE, LS, MW,	MZ, SD, S	SL, SZ, TZ, UG, ZM, Z	W, AM, AZ, BY,
KG, KZ,	MD, RU, TJ,	TM, AT, B	SE, BG, CH, CY, CZ, D	E, DK, EE, ES,
FI, FR,	GB, GR, IE,	IT, LU, M	IC, NL, PT, SE, SK, T	R, BF, BJ, CF,

CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO: US 2001-327208P P 20011004
OTHER SOURCE(S): MARPAT 138:304288
GI

The present invention refers to novel multiple action compds., i.e., to AB compds. which contain at least two pharmaceutically active components in one mol. The compds. have a higher stability than corresponding compds. of the prior art. Although the present invention does not claim any specific compds. or even a Markush expression, the examples involve oxazolidinones having a quinolone or naphthyridinone moiety (shown as I; variables defined below; e.g. 7-[4-[4-[(5S)-5-(acetylaminomethyl)-2oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid (shown as II)) that are useful antibacterial agents and effective against a variety of multi-drug resistant bacteria. For I: A is a bond, NH, O, S, SO, SO2, SO2NH, PO4, -NH-CO-NH-, -CO-NH-, -CO-, -CO-O-, -NH-CO-O-, alkylene, alkenylene, alkynylene, heteroalkylene, arylene, heteroarylene, cycloalkylene, heterocycloalkylene, alkylarylene or heteroarylalkylene or a combination of two or more of these atoms or groups. X is CR5 or N; Y is CR6 or N; U is F or Cl; n = 0-3; R1 is H, F, Cl, Br, I, OH, NH2, alkyl or heteroalkyl; R2 is H, F or Cl; R3 is H, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R4 is heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R5 is H, F, Cl, OH, NH2, alkyl or heteroalkyl, or R3 and R5 can be linked via an alkylene, an alkenylene or heteroalkylene or be a part of a cycloalkylene or heterocycloalkylene group, in which case R3 is not H and R5 is not H, F, OH, NH2 or Cl; R6 is H, F, Cl or OMe. Although the methods of preparation are not claimed, 30

IT

example prepns. are included. All examples were tested against several gram pos. and gram neg. bacteria; typical MIC ranges (mg/L) are: S. aureus (MRSA: 0.125-2; MSSA: 0.06-1), E. faecalis ($\leq 0.03-1$), E. faecium $(\leq 0.03-1)$, and S. pneumoniae $(\leq 0.03-1)$. They all have a broader and more pronounced activity than the corresponding quinolone and oxazolidinone as well as a 1+1 combination of these two compds. The examples of this patent are the same as those of WO 03/031443 A1. 510729-82-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(drug candidate; preparation of dual action bactericides comprising oxazolidinone and quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria)

510729-82-5 CA RN

CN 3-Quinolinecarboxylic acid, 7-[4-[[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3oxazolidinyl]-2-fluorophenyl]thio]-1-piperidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L12 ANSWER 33 OF 45

ACCESSION NUMBER:

138:117647 CA

TITLE:

Sulfonyl aryl hydroxamates and their use as matrix

metalloprotease inhibitors

INVENTOR(S):

McDonald, Joseph J.; Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.; Rao, Shashidhar N.; Freskos, John N.; De Crescenzo, Gary A.; Mischke, Brent V.;

Getman, Daniel P.; Villamil, Clara I.

PATENT ASSIGNEE(S):

Pharmacia Corporation, USA; et al.

SOURCE:

PCT Int. Appl., 214 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

11

PATENT INFORMATION:

PATENT NO.	KIND DATE	E APPLI	CATION NO.	DATE
WO 2003007954	A2 2003	30130 WO 20	002-US23219	20020719
WO 2003007954	A3 2003	31023		
W: AE, AG, AL,	AM, AT, AU,	, AZ, BA, BB,	BG, BR, BY, BZ,	CA, CH, CN,
CO, CR, CU,	CZ, DE, DK,	, DM, DZ, EC,	EE, ES, FI, GB,	GD, GE, GH,
GM, HR, HU,	ID, IL, IN,	, IS, JP, KE,	KG, KP, KR, KZ,	LC, LK, LR,

```
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                             US 2001-909227
                                 20030417
     US 2003073845
                                                                     20010719
                          Α1
                                 20040224
     US 6696449
                          B2
                          A1
                                 20030130
                                             CA 2002-2453613
                                                                     20020719
     CA 2453613
                                             AU 2002-326432
     AU 2002326432
                          A1
                                 20030303
                                                                     20020719
                                             EP 2002-761148
                                 20040414
                                                                     20020719
     EP 1406626
                          Α2
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     BR 2002011430
                          Α
                                 20040713
                                             BR 2002-11430
                                                                     20020719
                          Т
                                 20050127
                                             JP 2003-513561
                                                                     20020719
     JP 2005502632
PRIORITY APPLN. INFO.:
                                             US 2001-909227
                                                                  Α
                                                                    20010719
                                             US 1997-35182P
                                                                  P
                                                                     19970304
                                             WO 1998-US4300
                                                                  W
                                                                     19980304
                                             US 1999-310813
                                                                  B2 19990512
                                             US 1999-230209
                                                                  A2 19990624
                                             US 2000-569034
                                                                  A2 20000511
                                             US 2000-728408
                                                                  A2 20001201
                                             WO 2002-US23219
                                                                     20020719
                                                                  W
```

OTHER SOURCE(S): MARPAT 138:117647

AB The invention discloses sulfonyl aromatic hydroxamic acid compds. and salts thereof that, inter alia, inhibit matrix metalloprotease (MMP) activity and/or aggrecanase activity. The invention also is directed to a process that comprises administering such a compound or pharmaceutically acceptable salt thereof to a host animal having a condition associated with MMP activity.

IT 308385-58-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(use of sulfonyl aryl or heteroaryl hydroxamic acids and derivs. as aggrecanase inhibitors)

RN 308385-58-2 CA

CN Benzamide, N-hydroxy-2,3-dimethoxy-6-[[4-(phenylthio)-1-piperidinyl]sulfonyl]- (9CI) (CA INDEX NAME)

L12 ANSWER 34 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

138:117646 CA

TITLE:

Use of sulfonyl aryl or heteroaryl hydroxamic acids

and derivatives as aggrecanase inhibitors INVENTOR(S): McDonald, Joseph J.; Barta, Thomas A.; Art

McDonald, Joseph J.; Barta, Thomas A.; Arner, Elizabeth; Boehm, Terri L.; Becker, Daniel P.;

Decrescenzo, Gary A.

PATENT ASSIGNEE(S):

Pharmacia Corporation, USA

SOURCE:

PCT Int. Appl., 274 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

WO 2003007930	PATENT NO.					KIND DATE			APPLICATION NO.						D	ATE		
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003171404 A1 20030911 US 2002-194897 20020712 US 6683078 B2 20040127 CA 2453602 A1 20030130 CA 2002-2453602 20020719 EP 1406602 A2 20040414 EP 2002-763298 20020719 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK BR 2002011210 A 20040713 BR 2002-11210 20020719											wo 2	002-1	US22	867		2	0020	719
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003171404 A1 20030911 US 2002-194897 20020712 US 6683078 B2 20040127 CA 2453602 A1 20030130 CA 2002-2453602 20020719 EP 1406602 A2 20040414 EP 2002-763298 20020719 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK BR 2002011210 A 20040713 BR 2002-11210 20020719		₩:	CO, GM, LS,	CR, HR, LT,	CU, HU, LU,	CZ, ID, LV,	DE, IL, MA,	DK, IN, MD,	DM, IS, MG,	DZ, JP, MK,	EC, KE, MN,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, PL,	GH, LR, PT,
CA 2453602 A1 20030130 CA 2002-2453602 20020719 EP 1406602 A2 20040414 EP 2002-763298 20020719 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,		2003	GH, KG, FI, CG,	GM, KZ, FR, CI,	KE, MD, GB, CM,	LS, RU, GR, GA, A1	MW, TJ, IE, GN,	TM, IT, GQ, 2003	AT, LU, GW, 0911	BE, MC, ML,	BG, NL, MR,	CH, PT, NE,	CY, SE, SN,	CZ, SK, TD,	DE, TR, TG	DK, BF,	EE, BJ,	ES, CF,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK BR 2002011210 A 20040713 BR 2002-11210 20020719	CA	2453 1406	602 602			A1 A2		2003 2004	0130 0414	[EP 2	002-	7632	98		2	0020	719
PRIORITY APPLN. INFO.: US 2001-306629P P 20010719 WO 2002-US22867 W 20020719	JP	2002	IE, 0112: 50402	SI, 10 26	LT,	LV, A	FI,	RO, 2004	MK, 0713	CY,	AL, BR 20 JP 20 JS 20	TR, 002-1 003-1	BG, 11210 51353 30662	CZ, 0 38 29P	EE,	SK 20 20	0020 0020 0010	719 719 719

OTHER SOURCE(S): MARPAT 138:117646

The invention discloses a process for inhibiting aggrecanase activity. The process comprises administering a therapeutically effective amount of a sulfonyl aromatic or heteroarom. hydroxamic acid, a derivative thereof, or a pharmaceutically acceptable salt of the hydroxamic acid or derivative to a host animal.

IT 308385-58-2P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(use of sulfonyl aryl or heteroaryl hydroxamic acids and derivs. as aggrecanase inhibitors)

RN 308385-58-2 CA

Benzamide, N-hydroxy-2,3-dimethoxy-6-[[4-(phenylthio)-1-CNpiperidinyl]sulfonyl]- (9CI) (CA INDEX NAME)

CA COPYRIGHT 2007 ACS on STN L12 ANSWER 35 OF 45 ACCESSION NUMBER: 137:263031 CA

10/500,517

Preparation of 5-substituted imidazolidine-2,4-diones TITLE: as metalloproteinase inhibitors Eriksson, Anders; Lepistoe, Matti; Lundkvist, Michael; INVENTOR(S): Munck Af Rosenschoeld, Magnus; Zlatoidsky, Pavol Astrazeneca AB, Swed. PATENT ASSIGNEE(S): PCT Int. Appl., 153 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: 6 PATENT INFORMATION:

DATE KIND APPLICATION NO. DATE PATENT NO. ----------------______ ----WO 2002074767 A1
WO 2002074767 A8 WO 2002-SE472 20020313 20020926 A8 20040422 WO 2002074767 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2002-2440630 CA 2440630 A1 20020926 20020313 20031215 EE 200300445 Α EE 2003-445 20020313 EP 2002-704031 20031217 20020313 EP 1370556 A1 20060719 EP 1370556 B1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR BR 2002008104 A 20040302 BR 2002-8104 20020313 CN 2002-809788 20020313 CN 1509272 Α 20040630 A CN 2002-809915 20020313 CN 1509286 20040630 A 20040630 T 20040909 A2 20050128 CN 2002-810093 CN 1509276 20020313 JP 2002-573776 JP 2004527515 20020313 HU 200400327 HU 2004-327 20020313 NZ 2002-528106 NZ 528106 Α 20050324 20020313 A2 20060705 A3 20060726 EP 1676846 A2 EP 2006-8158 20020313 EP 1676846 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR AT 333454 Т 20060815 AT 2002-704031 20020313 RU 2003-127734 20020313 C2 RU 2288228 20061127 20030827 IN 2003-MN805 IN 2003MN00805 20050318 Α A 20041129 A 20041129 A 20041129 A 20041129 A 20031110 A1 20040701 A1 20061222 ZA 2003006731 ZA 2003-6731 20030828 ZA 2003-6732 · ZA 2003006732 20030828 ZA 2003006734 ZA 2003-6734 20030828 ZA 2003006737 ZA 2003-6737 20030828 NO 2003004045 NO 2003-4045 20030912 US 2004127528 US 2004-471900 20040114 HK 1059932 HK 2004-102796 20040421 A 20010315 A3 20020313 W 20020313 PRIORITY APPLN. INFO.: SE 2001-902 EP 2002-704031

WO 2002-SE472

OTHER SOURCE(S): MARPAT 137:263031

GI

The title compds. [I; X = NR1, O, S; Y1, Y2 = O, S; Z = SO, SO2; m = 1, 2; A = a bond, alkyl, haloalkyl, etc.; R1 = H, alkyl, haloalkyl; R2, R3 = H, halo, alkyl, etc.; R4 = H, halo, alkyl, haloalkyl; R5 = monocyclic, bicyclic or tricyclic group selected from (un)substituted cycloalkyl, aryl, heterocycloalkyl, heteroaryl], useful as metalloproteinase inhibitors, especially as inhibitors of MMP12, were prepared Thus, reacting 1-[4-(4-fluorophenyl)phenyl]piperazine and 2-(2,5-dioxo-4-imidazolidinyl)-1-ethanesulfonyl chloride (preparation given) in the presence Et3N in CH2Cl2 afforded II.

IT 459815-70-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 5-substituted imidazolidine-2,4-diones as metalloproteinase inhibitors)

RN 459815-70-4 CA

CN Piperidine, 4-[(4-chlorophenyl)thio]-1-[[[(4S)-4-methyl-2,5-dioxo-4-imidazolidinyl]methyl]sulfonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 36 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 137:247696 CA

TITLE: Preparation of 5-substituted imidazolidine-2,4-diones

as metalloproteinase inhibitors

INVENTOR(S): Eriksson, Anders; Lepistoe, Matti; Lundkvist, Michael;

Munck Af Rosenschoeld, Magnus; Zlatoidsky, Pavol

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 300 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

										APPLICATION NO. DATE									
WO	2002	0747											 SE47	 5			20	020	 313
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	3,	BG,	BR,	BY,	ΒZ,	CZ	١,	CH,	CN,
							DK,												
					•		IN,											-	
		LS,	LT,	LU,	LV,	MA	MD,	MG,	MK,	M	1,	MW,	MX,	MZ,	NO,	NZ		OM,	PH,
							SE,												
							YU,					•	•	•	·		•	•	•
	RW:	GH,	GM,	KE,	LS,	MW.	MZ,	SD,	SL,	SZ	Z,	TZ,	UG,	ZM,	ZW,	ΑT		BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE	Ξ,	IT,	LU,	MC,	NL,	ΡΊ		SE,	TR,
							CM,												
CA	2440				A1		2002												
EE	2003	0043	9		Α														
EP	1370	536			A1		2003	1217		ΕP	20	02-	7040	34			20	020	313
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	۲,	IT,	LI,	LU,	NL,	SE	:,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑI		TR							
BR	2002	0081	05		Α		2004	0309		BR	20	02-8	B105				20	020	313
	1509						2004												
HU	2004	00206	5		A2		2004	0830		HU	20	04-2	206				20	020	313
JP	2004 2004	5275 :	11		T		2004	0909		JР	20	02-	5737	59			20	020	313
EP	1676	846					2006												
EP	1676						2006					``							
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹,	IT,	LI,	LU,	NL,	SE	,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑI	٠, ١	TR							
IN	2003	800MM	300		Α		2005	0318		IN	20	03-1	08MM	0			20	030	827
NO	2003	00402	25		Α		2003	1113		NO	20	03-4	1025				20	030	911
US	2004	1475	73		A1		2004	0729		US	20	03-4	47180	80			20	030	912
PRIORITY	2004 Y APP	LN.	INFO	. :						SE	20	01-9	902			Α	20	010	315
																	20	010	315
														31			20	020	313
								•		WO	20	02-5	SE475	5	1	W	20	020	313
OTHER SO	OTHER SOURCE(S):						MARPAT 137:2476												

GI

$$Y^1$$
 X
 Y^2
 Y^2

AB The title compds. [I; X = NR1, O, S; B = C, CH, and is a point of attachment of one or more other functional groups or side chains; Y1, Y2 = O, S; R1 = H, alkyl, haloalkyl], useful in the treatment of a disease or condition mediated by one or more metalloproteinase enzymes (no biol. data), were prepared E.g., a 4-step synthesis of II, starting with 4-(4-chlorophenyl) benzaldehyde, was given.

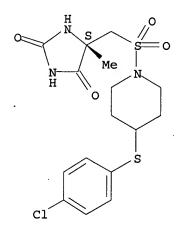
IT 459815-70-4P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of 5-substituted imidazolidine-2,4-diones as metalloproteinase inhibitors)

RN 459815-70-4 CA

CN Piperidine, 4-[(4-chlorophenyl)thio]-1-[[[(4S)-4-methyl-2,5-dioxo-4imidazolidinyl]methyl]sulfonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 37 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

TITLE:

INVENTOR(S):

137:201139 CA

Substituted polycyclic aryl and heteroaryl

tertiary-heteroalkylamines useful for inhibiting

cholesteryl ester transfer protein activity

Sikorski, James A.; Durley, Richard C.; Mischke,

Deborah A.; Reinhard, Emily J.; Fobian, Yvette M.;

Tollefson, Michael B.; Wang, Lijuan; Grapperhaus,

Page 159

Margaret L.; Hickory, Brian S.; Massa, Mark A.; Norton, Monica B.; Vernier, William F.; Parnas, Barry L.; Promo, Michele A.; Hamme, Ashton T.; Spangler, Dale P.; Rueppel, Melvin L.

PATENT ASSIGNEE(S): G.D. Searle & Co., USA

SOURCE:

U.S. Pat. Appl. Publ., 157 pp., Division of U.S. Ser.

No. 405,524. CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

3

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002120011	A1	20020829	US 2001-991174	20011114
US 6479552	B2	20021112		
US 6448295	B1	20020910	US 2001-991208	20011114
US 6451823	B1	20020917	US 2001-990645	20011114
US 6451830	B1	20020917	US 2001-991085	20011114
US 6458852	B1	20021001	US 2001-991210	20011114
US 6458849	B1	20021001	US 2001-991273	20011114
US 6462092	B1	20021008	US 2001-990811	20011114
US 6476057	B2	20021105	US 2001-990833	20011114
US 2002165232	A1	20021107		
US 6476075	B1	20021105	US 2001-991301	20011114
US 2002165231	A1	20021107	US 2001-991241	20011114
US 6586433	B2	20030701		
US 6455519	B1	20020924	US 2001-991116	20011115
US 6458803	B1	20021001	US 2001-991084	20011123
US 2003032644	A1	20030213	US 2002-71518	20020207
US 6723753	B2	20040420		•
US 2003087905	A1	20030508	US 2002-154726	20020523
US 6677353	B2	20040113		
US 2003096818	A1	20030522	US 2002-155921	20020523
US 6765023	B2	20040720		
US 2003100559	A1	20030529	US 2002-155095	20020523
US 6677379	B2	20040113		
US 2003105100	A1	20030605	US 2002-155451	20020523
US 6683099	B2	20040127		
US 2003119833	A1	20030626	US 2002-154571	20020523
US 6677375	B2	20040113		
US 2003125328	A1	20030703	US 2002-154788	20020523
US 6696472	B2	20040224		
US 2003125329	A1	20030703	US 2002-155346	20020523
US 6677380	B2	20040113		
US 6677382	B1	20040113	US 2002-155410	20020523
PRIORITY APPLN. INFO.:	•		US 1999-405524	A3 19990923
		•	US 2001-990645	A1 20011114
		•	US 2001-990811	A1 20011114
			US 2001-990833	A1 20011114
			US 2001-991174	A1 20011114
			US 2001-991210	A1 20011114
			US 2001-991273	A1 20011114
			US 2001-991301	A1 20011114
omven acres (= (=)	W3 E E E =		US 2001-991084	A1 20011123
OTHER COIDCE(C).	MARRAT	127.201120		

OTHER SOURCE(S):

GI

MARPAT 137:201139

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [X = NH, N(OH), N-alkyl; R16 = hydrido; n = 1-2; R1 =AB haloalkyl, haloalkoxyalkyl; R2 = hydrido, hydroxyalkyl, aryl, aralkyl, alkyl, alkenyl, alkynyl, etc.; R3 = hydrido, alkyl, alkenyl, alkoxyalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, alkenyloxyalkyl, etc.; Y = bond, alkyl; Z = bond, alkyl; R4, R8-9, R13 = hydrido, halo, haloalkyl, alkyl; R5-7, R10-12 = hydrido, perhaloaryloxy, alkanoylalkyl, alkanoylalkoxy, alkanoyloxy, N-aryl-N-alkylamino, heterocyclylalkoxy, etc.; with provisions] were prepared for the treatment of atherosclerosis and other coronary artery diseases. I are useful as inhibitors of cholesteryl ester transfer protein (CETP; plasma lipid transfer protein-I). Examples include over 700 syntheses and data from two bioassays on CETP activity. For instance, reaction of 3-bromoaniline with 3-(1,1,2,2tetrafluoroethoxy)benzaldehyde in the presence of NaBH(OAc)3 and AcOH formed the secondary amine (96%). Addition of 1,1,1-trifluoro-2,3epoxypropane in CH2Cl2 and Yb(OTf)3 gave the alc. (99%), which was silylated with tert-butyldimethylsilyl trifluoromethanesulfonate (58%). Heating a solution of the tertiary amine with 4-chloro-3-ethylphenol, Cs2CO3, copper triflate benzene complex, and 1-naphthoic acid in 2:1 toluene: dimethylacetamide for 96 h gave II (23%). The latter inhibited CETP activity with IC50 values of 0.034 μM and 0.88 μM , resp., in the reconstituted buffer and human plasma assays.

263345-16-0P, 2-Propanol, 1,1,1-trifluoro-3-[[3-(4-ITpiperidinylthio)phenyl][[3-(1,1,2,2-tetrafluoroethoxy)phenyl]methyl]amino]-RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compound; preparation of substituted polycyclic aryl and heteroaryl tertiary-heteroalkylamines as cholesteryl ester transfer protein inhibitors for the treatment of atherosclerosis and other coronary artery disease)

263345-16-0 CA RN

> 2-Propanol, 1,1,1-trifluoro-3-[[3-(4-piperidinylthio)phenyl][[3-(1,1,2,2tetrafluoroethoxy)phenyl]methyl]amino]- (9CI) (CA INDEX NAME)

L12 ANSWER 38 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

137:140442 CA

TITLE:

INVENTOR(S):

CN

Preparation of 1,5-diaryl-7-heterocyclyl(alkyl)-2-

quinolinones as p38 protein kinase inhibitors

Doherty, James B.; Stelmach, John E.; Chen, Meng-Hsin;

Liu, Luping; Hunt, Julianne A.; Ruzek, Rowena D.; Goulet, Joung L.; Wisnoski, David D.; Natarajan, Swaminathan Ravi; Rupprecht, Kathleen M.; Bao,

Jianming; Miao, Shouwu; Hong, Xingfang

PATENT ASSIGNEE(S):

SOURCE:

Merck & Co., Inc., USA PCT Int. Appl., 440 pp.

CODEN: PIXXD2

10/500,517

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

					KIND DATE			APPLICATION NO.						D	ATE		
	2002 2002		95		A1					WO 2	2001-	US48	676		2	0011	214
	٠	CO, GM, LT, PT, UG, GH, KG,	CR, HR, LU, RO, US, GM, KZ, IE,	CU, HU, LV, RU, UZ, KE, MD, IT,	CZ, ID, MA, SD, VN, LS, RU, LU,	DE, IL, MD, SE, YU, MW, TJ, MC,	DK, IN, MG, SG, ZA, MZ, TM,	DM, IS, MK, SI, ZM, SD, AT, PT,	DZ, JP, MN, SK, ZW SL, BE, SE,	EC, KE, MW, SL, SZ, CH, TR,	BG, EE, KG, MX, TJ, TZ, CY, BF,	ES, KR, MZ, TM, UG, DE,	FI, KZ, NO, TN,	GB, LC, NZ, TR, ZW, ES,	GD, LK, OM, TT,	GE, LR, PH, TZ, AZ, FR,	GH, LS, PL, UA, BY, GB,
CA	2431			•	ML, MR, NE, SN, A1 20020801				•		001-	2431	904		2	0011:	214
EP	1345	603							EP 2001-994260						2	0011	214
	R:							FR, MK,			IT, TR	LI,	LU,	NL,	SE,	MC,	PT,
JP	2004			-	•	•			•			5590:	29		2	0011	214
JP 2004521892 US 2003092712																0011	
US 6809199																	
PRIORITY APPLN. INFO.: OTHER SOURCE(S):									1		000-1 001-1						
GI GI	JURCE	(S):			MARI	PAT	137:	14044	12								

$$C1$$
 $C1$
 R^2
 R^2

Ι

AB Title compds. were prepared Thus, 2,6-dibromo-4-methoxytoluene was converted in 5 steps to arylquinolinone I (R1 = Br, R2 = OMe) which was condensed with 2,4-F2C6H3B(OH)2 and the O-demethylated product converted in 4 steps to I (R1 = C6H3F2-2,4, R2 = 4-piperidinyl). Data for biol. activity of title compds. were given.

IT 444663-34-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 1,5-diaryl-7-heterocyclyl(alkyl)-2-quinolinones as p38 protein kinase inhibitors)

RN 444663-34-7 CA

CN 2(1H)-Quinolinone, 5-(2-chloro-4-fluorophenyl)-1-(2,6-dichlorophenyl)-7-[[1-(1,1-dimethylethyl)-4-piperidinyl]thio]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 39 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

TITLE:

137:94011 CA

Preparation of peptide compounds having NOS inhibiting

activity

INVENTOR (S):

Shima, Ichiro; Ohkawa, Takehiko; Sato, Kentaro;

Ishibashi, Naoki; Imamura, Kenichiro

PATENT ASSIGNEE(S):

Fujisawa Pharmaceutical Co., Ltd., Japan PCT Int. Appl., 79 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE			APPLICATION NO.							ATE			
WO.	2002	0555	 41				2002	0718								0011	218	
	2002											J			_			
""	W:				-		AU,		RΔ	BB	BG	BB	BY	B2	CA	СН	CN	
	** .	•	•	•	•	•	DK,				•	•	•				-	
		•	•	•	•	•	IN,	•	•		•		-	-	-		-	
		•	•	•	•	•	MG,	•			•	-	, ,				-	
		•	•	•	•	•	SG,	•		-	•		•		-	-	-	
		•	•	•	•	•	ZA,	•	•	,	10,	,	,	,	,	,	J ,	
	RW:	•	•	•	•		MZ,	•		SZ.	ТZ.	UG.	ZM.	ZW.	AM.	AZ.	BY.	
	2000	•				-	TM,	-			•	-						
				-	-	-	NL,	-	-		•	-						
		•	•	•	•	•	NE,	•	•	•	,	,	,	,	,	,	,	
CA	2433	•			•	-		-	-		001-	2433!	582		2	0011	218	
	1347																	
							ES,											
			-	-	-							,		•	•		•	
HU	IE, SI, LT, LV, FI, RO, M U 200302535 A2 2003112										2535			20	00112	218		
	R 2001016778 A 2004021																	
	TP 2004517877 T 2004061																	
	CN 1531546 A 200							2 CN 2001-822910						20011218				
NZ	5271	89			Α		2005	0128]	NZ 2	001-	5271	89		20	00112	218	

RU	2281955	C2	20060820	RU	2003-124057		20011218
ИО	2003002963	Α	20030902	NO	2003-2963		20030627
ZA	2003005888	A	20041101	ZA	2003-5888		20030730
IN	2003CN01180	Α	20050422	IN	2003-CN1180		20030730
US	2004097425	A1	20040520	US	2003-250444		20031223
US	7129243	B2	20061031				
PRIORITY	APPLN. INFO.:			AU	2001-2371	Α	20010102
				ΑU	2001-7506	Α	20010905
				WO	2001-JP11067	W	20011218
OMITTON GO	TIMOR (C).	MADDAG	127.04011				

OTHER SOURCE(S):

MARPAT 137:94011

GΙ

Ι

AB Peptides I (R1 = halobenzofuranyl or halostyryl; R2 = substituted hydroxy, mercapto, or sulfonyl; X = CH2, CH2CH2, CH2CH2CH2) or their pharmaceutically acceptable salts were prepared for the prevention and/or treatment of nitric oxide-mediated diseases. Thus, 5-chloro-N-[(1S)-2-oxo-2-[(2-oxo-2-[4-(1,3-thiazol-2-yloxy)-1-piperidinyl]ethyl]amino]-1-(2-pyridylmethyl)ethyl]-1-benzofuran-2-carboxamide (II) was prepared via amidation reaction and showed 100% inhibition of nitric acid. The combination of compds. I and FK507 dramatically prolonged graft survival in rat cardiac allograft.

IT 442199-03-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of peptide compds. having NOS inhibiting activity)

RN 442199-03-3 CA

CN

2-Pyridinepropanamide, α-[[(2E)-3-(4-chlorophenyl)-1-oxo-2-propenyl]amino]-N-[2-[4-[(4-chlorophenyl)thio]-1-piperidinyl]-2-oxoethyl]-, (αS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L12 ANSWER 40 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 137:63177 CA

TITLE: Preparation of piperidine derivatives as subtype

selective n-methyl-d-aspartate antagonists useful in

the treatment of cerebral vascular disorders

INVENTOR(S): Kornberg, Brian Edward; Lewthwaite, Russell Andrew;

Manning, David Douglas; Nikam, Sham Shridhar; Scott,

Ian Leslie

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: PCT Int. Appl., 154 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050070	·A2	20020627	WO 2001-IB2277	20011130
WO 2002050070	A3	20020919		
W: AE, AG, AL,	AM, AT	, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,
CO, CR, CU,	CZ, DE	, DK, DM,	DZ, EC, EE, ES, FI,	GB, GD, GE, GH,
			JP, KE, KG, KP, KR,	
			MK, MN, MW, MX, MZ,	
			SI, SK, SL, TJ, TM,	
UG, US, UZ,	VN, YU	, ZA, ZW,	AM, AZ, BY, KG, KZ,	MD, RU, TJ, TM
RW: GH, GM, KE,	LS, MW	, MZ, SD,	SL, SZ, TZ, UG, ZM,	ZW, AT, BE, CH,
CY, DE, DK,	ES, FI	, FR, GB,	GR, IE, IT, LU, MC, I	NL, PT, SE, TR,
BF, BJ, CF,	CG, CI	, CM, GA,	GN, GQ, GW, ML, MR,	NE, SN, TD, TG
•			CA 2001-2436699	
AU 2002023968				
US 2003018021				
		20031104		
			BR 2001-16311	20011130
			EP 2001-271104	
			GB, GR, IT, LI, LU, I	
			CY, AL, TR	, , , ,
, , ,			JP 2002-551566	20011130
PRIORITY APPLN. INFO.:			US 2000-257832P	
			WO 2001-IB2277	
OTHER SOURCE(S):	MARPAT	137:63177		

GI

Title compds. I [R1 = mono, di or trisubstituted aryl with substituents AB selected from (un) substituted alkyl, alkenyl, alkoxy, etc.; n = 0-1; R2 and R3 independently = H, OH, (un) substituted alkoxy; X = (CH2) m or (CH2)qCO, wherein m = 1-4 and q = 0-4; X1 = 4-, 5-, or 6-membered, carbon-linked, (un) substituted heterocyclene, containing 1-3 heteroatoms selected from N, O and S; R4 = H, R5 = OH or R4R5 taken together with the phenylene to which they are attached from a fused 9- or 10-membered bicyclic ring, containing 0-3 heteroatoms selected from N, O and S, wherein R4 is a linker group containing 2 or 3 atoms of the bicyclic ring, and R5 is a H bond donor group containing 1 atom of the bicyclic ring; R6 = (un)substituted alkyl, alkenyl, alkoxy, CN, NO2, etc.; n = 0-2] and their pharmaceutically acceptable salts thereof are prepared and disclosed as subtype selective n-methyl-d-aspartate antagonists. Thus, II was prepared in three steps via bromination of benzoxazolinone, substitution with 3-(4benzylpiperidinyl)propyne and cyclocondensation with acetaldoxime. I possessed IC50 values of 0.002-0.788 (μM) in [3H]ifenprodil binding assays. I are antagonists of NMDA receptor channel complexes, and therefore, are useful for treating cerebral vascular disorders. IT

438635-16-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of aryl- and arylalkylpiperidines as subtype selective n-methyl-d-aspartate antagonists)

RN

Piperidine, 4-[(4-fluorophenyl)thio]-1-(2-propenyl)- (9CI) (CA INDEX NAME)

CN

L12 ANSWER 41 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 136:194114 CA

TITLE: 4-(Phenylsulfonyl)piperidines: Novel, Selective, and

Bioavailable 5-HT2A Receptor Antagonists

AUTHOR(S): Fletcher, Stephen R.; Burkamp, Frank; Blurton, Peter;

Cheng, Susan K. F.; Clarkson, Robert; O'Connor, Desmond; Spinks, Daniel; Tudge, Matthew; van Niel, Monique B.; Patel, Smita; Chapman, Kerry; Marwood, Rose; Shepheard, Sara; Bentley, Graham; Cook, Gina P.; Bristow, Linda J.; Castro, Jose L.; Hutson, Peter H.;

MacLeod, Angus M.

CORPORATE SOURCE: Merck Sharp and Dohme, The Neuroscience Research

Centre, Harlow Essex, CM20 2QR, UK

SOURCE: Journal of Medicinal Chemistry (2002), 45(2), 492-503

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB On the basis of a spirocyclic ether screening lead, a series of acyclic sulfones have been identified as high-affinity, selective 5-HT2A receptor antagonists. Bioavailability lacking in the parent, 1-(2-(2,4-

difluorophenyl)ethyl)-4-(phenylsulfonyl)piperidine, was introduced by using stability toward rat liver microsomes as a predictor of

bioavailability. By this means, the 4-cyano- and 4-

carboxamidophenylsulfonyl derivs. were identified as orally bioavailable, brain-penetrant analogs suitable for evaluation in animal models.

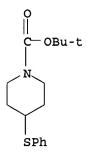
Bioavailability was also attainable by N substitution leading to the N-phenacyl derivative IKr activity detected through counterscreening was reduced to insignificant levels in vivo with the latter compound

IT 154612-64-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and structure activity of 4-(phenylsulfonyl)piperidines as novel, selective, and bioavailable 5-HT2A receptor antagonists)

RN 154612-64-3 CA



REFERENCE COUNT:

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 42 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

136:134784 CA

TITLE:

Preparation of hydrocarbyl sulfone derivatives as

inhibitors of activated blood coagulation factor X and

process for their production

INVENTOR (S):

Kubo, Keiji; Miyawaki, Toshio; Kawamura, Masaki

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 252 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT I	NO.			KIN	D	DATE			APPI	LICAT	ION 1	NO.		D	ATE	
, WO	2002	0062	34		A1		2002	0124		WO 2	2001-	JP61	48		2	0010	 717
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	, BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	, EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	, KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	, MX,	MZ,	NO,	NZ,	PL,	PT,	RO,
		RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,
		VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	, MD,	RU,	ΤJ,	TM			
•	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	, TZ,	UG,	ZW,	ΑT,	ΒE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	, LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	, ML,	MR,	ΝE,	SN,	TD,	TG	
AU	AU 2001069531				•				AU 2001-69531					2	0010	717	
JP	JP 2002201178								JP 2001-216830								
CA	2416	384			A1		2003	0116		CA 2	2001-	2416	384		2	0010	717
EP	1302	462			A1		2003	0416		EP 2	2001-	9480	32		2	0010	717
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL,	TR						
US	2003	18702	23		A1		2003	1002		US 2	2003-	3333	80		2	0030	116
PRIORITY APPLN. INFO.:									JP 2	2000-:	2210	65	1	A 2	0000	717	
										WO 2	2001-	JP61	48	. 1	W 2	0010	717
OTHER SO	OURCE	(S):		•	MAR	TAS	136:	1347	84								

$$R-W-(S)_{n}-X-Y-(N)_{m}-Z-(A)_{m}-Z1$$

AB Compds. represented by the general formula (I) or salts thereof [wherein R = (un)substituted cyclic hydrocarbyl or heterocyclyl; W = a bond, (un) substituted divalent hydrocarbon chain; X = (un) substituted divalent hydrocarbon group; Y, Z = NR6, CO, SO, SO2, CH2, NR6CO, COCH2, a bond; ring A = (un) substituted N-containing heterocyclyl; R5, R6 = H, (un) substituted hydrocarbyl, (un) substituted alkoxy, optionally esterified or amidated carboxyl, (un) substituted acyl; or R5 is linked to the substituent of X or that of the ring A to form a ring; Z1 = (un) substituted imidoyl or N-containing heterocyclyl; n = 0,1,2; m = 0,1] or salts thereof, which inhibit activated blood coagulation factor X (no data), are prepared These compds. are useful as anticoagulants for the treatment or prevention of myocardial infarction, cerebral thrombosis, deep venous thrombosis, pulmonary thromboembolism, or thromboembolism during or after surgery. Thus, a solution of 3-[(6-chloro-2naphthyl)sulfonyl]propanoic acid (preparation given),

4-methylamino-1-(2-methyl-

4-pyridyl)piperidine (preparation given), DMTMM in THF was stirred at room temperature for 16 h to give 38%

3-[(6-chloro-2-naphthyl)sulfonyl]-N-methyl-N-[1-

(2-methyl-4-pyridyl)-4-piperidinyl]propanamide (II). A capsule and tablet formulation containing II were prepared

IT 392328-65-3P, 4-[(6-Chloro-2-naphthyl)thio]-1-[[1-(4-pyridyl)-4piperidinyl]carbonyl]piperidine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(preparation of hydrocarbyl sulfone derivs. as inhibitors of activated blood coagulation factor X and anticoagulants for therapeutic agents)

RN 392328-65-3 CA

CN Piperidine, 4-[(6-chloro-2-naphthalenyl)thio]-1-[[1-(4-pyridinyl)-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 43 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

136:134675 CA

TITLE:

Preparation of heterocyclic amino alcohol beta-3

adrenergic receptor agonists

INVENTOR(S):

Ashwell, Mark Anthony; Solvibile, William Ronald; Quagliato, Dominick Anthony; Molinari, Albert John

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

SOURCE:

PCT Int. Appl., 208 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND DATE		APPLICATION NO.					DATE						
						-									-		
WO	WO 2002006229				A2 20020124			WO 2001-US22327						20010716			
WO	2002	0062	29		A3		2002	0725				•					
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	.JP,	KE	, KG,	KΡ,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	1, 'MW,	MX,	MZ,	NO,	NZ,	PL,	PT,
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ	ſ, TM,	TR,	TT,	TZ,	UA,	ŪĠ,	UΖ,
		VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ	, MD,	RU,	ТJ,	TM			
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	ŪG,	ZW,	ΑT,	ΒE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	II	ւ, ևՄ,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML	, MR,	NE,	SN,	TD,	TG		
US	2002	0288	32		A1		2002	0307		US	2001-	9038	41		2	0010	712
US	6451	814			B2		2002	0917									
US	2003	0180	45		A1		2003	0123	,	US	2002-	1893	12		2	0020	702
US	6605	618			B2		2003	0812									
PRIORITY APPLN. INFO.:									US	2000-	2186	28P		P 2	0000	717	
										US	2001-	9038	41		A1 2	0010	712

AB This invention provides A-U-CH(OH)CH2NHCH2CH2VC6H4WZ-p (1; Z = (1-Y-X-substituted piperidin-4-yl)) or a pharmaceutically acceptable salt

thereof, which are useful in treating or inhibiting metabolic disorders related to insulin resistance or hyperglycemia (typically associated with obesity or glucose intolerance), atherosclerosis, gastrointestinal disorders, neurogenic inflammation, glaucoma, ocular hypertension and frequent urination; and are particularly useful in the treatment or inhibition of type II diabetes. β3-Adrenergic receptor EC50 and maximal response (IA; % activity compound/% activity isoproterenol) values are reported for .apprx.100 example compds., e.g. 0.032 μM and 1.04 for 4-[4-[2-[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propylamino]ethyl]phenylamino] piperidine-1-carboxylic acid 2,6-difluorobenzylamide. In 1, A is (a) a 5-6 membered heterocyclic ring having 1-4 heteroatoms selected from O, N, and S, substituted with (R1)m; (b) a Ph ring substituted with (R1)m; (c) a naphthyl ring substituted with (R1)m; or (d) a Ph fused heterocycle selected from (R1) m-substituted 1,3-dihydro-2-oxo-2H-benzimidazol-4-yl, 1,3-benzodioxol-5-yl, 1,2,3,4-tetrahydro-2-oxoquinolin-5-yl, 1,2,3,4-tetrahydro-1-naphthylideneamino. U is -OCH2- or a bond; V is O or a bond; W is O, S(O) a, NR2, NC(O)R2; X = SO2, C(O), -(CH2)b, a bond, Ar; Y is -NR3R4, Het, Ar, alkyl of 1-8 C atoms, O(CH2)dR5. R1 is alkyl of 1-8 C atoms, -OR6, halogen, cyano, cycloalkyl of 3-8 C atoms, trifluoromethyl, CO2R6, -NR6R7, -C(0)NR6R7, -NHC(0)R6, -NR6C(0)NR8R8, -NHSO2R8, -S(0)aR6, -NO2, -O(CH2)eCO2R7, -OC(O)NR6R7, -O(CH2)fOR6, or a 5-6 membered heterocyclic ring containing 1 to 4 heteroatoms selected from O, S, and N. is H, alkyl of 1-8 C atoms, or arylalkyl having 1-8 C atoms in the alkyl moiety; R3 and R4 are each, independently, H, alkyl of 1-8 C atoms, cycloalkyl of 3-8 C atoms, arylalkyl having 1-8 C atoms in the alkyl group, -(CH2)gR9, -(CH2)hCOR9, -(CH2)jCR10R11(CH2)jR9, or -(CH2)kCONR12R13; or R3 and R4 may be taken together together with the N to which they are attached to form a 3-7 membered saturated heterocycle, which may optionally contain 1-2 addnl. heteroatoms selected from O and S, and said heterocycle may optionally be substituted with R14. R5 is H; alkyl of 1-8 C atoms optionally substituted by 1-3 substituents selected from hydroxy, halogen and aryl; cycloalkyl of 1-8 C atoms; Ar or Het; R6, R7, and R8 are each, independently, H, or alkyl of 1-8 C atoms, or aryl of 6-10 C atoms, cycloalkyl of 3-8 C atoms, or arylalkyl having 1-8 C atoms in the alkyl moiety; R9 is H; alkyl optionally substituted with 1-3 substituents selected from hydroxy, halogen, and aryl; cycloalkyl of 3-8 C atoms; Ar, or Het; R10 and R11 are each, independently, H, alkyl, or aryl optionally substituted with alkyl of 1-8 C atoms or halogen; or R10 and R11 are taken together to form a spiro fused cycloalkyl ring of 3-8 C atoms. R12 and R13 are each, independently, H, alkyl of 1-8 C atoms, aryl optionally substituted with alkyl of 1-8 C atoms or halogen; or R12 and R13 are taken together with the N to which they are attached to form a 3-7 membered saturated heterocycle, which may optionally contain 1-2 addnl. heteroatoms selected from O and S, and said heterocycle may optionally be substituted with R14; R14 is CO2R15 or aryl optionally substituted with a 1-3 substituents selected from -OR15 and cycloalkyloxy of 3-8 C atoms; R15 is alkyl of 1-8 C atoms or arylalkyl having 1-8 C atoms in the alkyl moiety. Ar is an aromatic ring system containing 1-2 carbocyclic aromatic rings

having 6-10 C atoms optionally mono, di, or trisubstituted with R16; Het is (a) a 5-6 membered heterocyclic ring having 1-4 heteroatoms selected from O, S, and N which may be optionally mono- or disubstituted with R16; or (b) a heterocyclic ring system optionally mono- or disubstituted by R16 containing a 5-6 membered heterocyclic ring fused to one or two carbocyclic or heterocyclic rings such that the heterocyclic ring system contains 1-4 heteroatoms selected from O, S, and N; R16 is aryl, halogen, alkyl of 1-8 C atoms, -OR17, cycloalkyl of 3-8 C atoms, trifluoromethyl, cyano, -CO2R17, -CONR17R18, -SO2NR17R18, -NR17OR18, -NR19CONR1 7R18, -NR17R18, -NR17COR18, -NO2, -O(CH2)pCO2R17, -OCONR17R18, -S(O)nR17, -O(CH2)qOR17, or a 5-6 membered heterocyclic ring containing 1-4 heteroatoms selected from O, S

and N. R17, R18, and R19 are each, independently, H, alkyl of 1-8 C atoms, arylalkyl having 1-8 C atoms in the alkyl moiety, or aryl optionally mono, di, or trisubstituted with halogen, cyano, nitro, hydroxy, alkyl of 1-8 C atoms, or alkoxy of 1-8 C atoms; or when R17 and R18 are contained on a common N, R17 and R18 may be taken together with the N to which they are attached to form a 3-7 membered saturated heterocycle, which may optionally contain 1-2 addnl. heteroatoms selected from O and S. A = 0-2; b = 1-6; d = 0-3; e = 1-6; f = 1-6; g = 0-6; h = 0-6; j = 0-6; k = 0-6; = 0-6; m = 0-2; p = 1-6; q = 1-6. Methods of preparation are claimed, comprising (a) reacting AOCH2-substituted oxirane or a protected form thereof in which a reactive substituent group is protected, with H2NCH2CH2VC6H4WZ-p or a protected form thereof in which a reactive substituent group is protected; and if required removing any protecting group to give 1 (U = -OCH2-). (b) reacting A-substituted oxirane or a protected form thereof in which any reactive substituent group is protected, with H2NCH2CH2VC6H4WZ-p or a protected form thereof in which a reactive substituent group is protected; and if required removing any protecting group to give 1 wherein U represents a bond;. (c) reacting ACH(OPr)CH2I, wherein Pr is a protecting group, with H2NCH2CH2VC6H4WZ-p or a protected form thereof in which a reactive substituent group is protected; and if required removing any protecting group to give 1 wherein U = -OCH2-. (d) reacting ACH(OH)CH2NH2 or a protected form thereof in which any reactive substituent group is protected, with HO2CCH2VC6H4WZ-p or a protected form thereof in which a reactive substituent group is protected; and if required removing any protecting group to give 1 wherein U = -OCH2-. (e) removing any protecting group from 1 in which at least one substituent carries a protecting group to give 1; or (f) converting a basic compound 1 to a salt thereof by reaction with a pharmaceutically acceptable acid; or (g) converting 1 having one or more reactive substituent groups to a different 1; or (h) isolating an isomer of 1 from a mixture thereof. More than 100 example prepns. are included. 392628-48-7P, tert-Butyl 4-[[1-(anilinocarbonyl)-4-

IT

piperidinyl]sulfanyl]phenethylcarbamate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of heterocyclic amino alc. beta-3 adrenergic receptor agonists)

RN 392628-48-7 CA

> Carbamic acid, [2-[4-[[1-[(phenylamino)carbonyl]-4piperidinyl]thio]phenyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L12 ANSWER 44 OF 45 CA COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

136:102293 CA

TITLE:

CN

Urethanes derived from azacycloalkanes, thio and dithio analogues, production and use thereof as 2,3-epoxysqualene lanosterol cyclase inhibitors

INVENTOR(S):

Maier, Roland; Hurnaus, Rudolf; Mark, Michael; Eisele,

Bernhard; Mueller, Peter; Schilcher, Gebhard;

Adelgoss, Gebhard

PATENT ASSIGNEE(S):

Boehringer Ingelheim Pharma Kg, Germany

10/500,517

SOURCE:

U.S., 14 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6339096	B1	20020115	US 1999-275317	19990324
PRIORITY APPLN. INFO.:			US 1998-73027P P	19980129
OTHER SOURCE(S).	маррат	136.102293		

GI

$$R^{1-Q}$$
 $N-C-Y-R$

Approx. 20 piperidine hydrochlorides [I, R = benzyl, Ph, p-tolyl, AB p-ClC6H4, p-FC6H4; R1 = p-Me2NC6H4, 4-piperidinomethylphenyl; X, Y = 0, S; Q = S, CO, CH2, SO] were prepared by standard methods and were tested as anticholesteremics and fungicides. E.g., the MIC for I (R = benzyl, R1 = p-Me2NC6H4, X = Y = Q = S) against Trichophyton mentagrophytes was 1 $\mu g/mL$.

IT 227100-33-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation and pharmacol. activity of aminomethylphenylpiperidino carbamates)

RN 227100-33-6 CA

1-Piperidinecarbodithioic acid, 4-[[4-[(dimethylamino)methyl]phenyl]thio]-CN , phenylmethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ \text{Ph-CH}_2-\text{S-C} & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

HC1

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CA COPYRIGHT 2007 ACS on STN L12 ANSWER 45 OF 45

ACCESSION NUMBER:

136:85815 CA

TITLE:

Preparation of 2,3,4,5-tetrahydro-1H-3-benzazepine

derivatives as GPR14 antagonists

INVENTOR(S):

Tarui, Naoki; Santo, Takashi; Watanabe, Hiroyuki; Aso,

Kazuyoshi; Ishihara, Yuji

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 217 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2002002530		WO 2001-JP5784	20010704			
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,			
CO, CR, CU,	CZ, DE, DK, DM,	DZ, EC, EE, ES, FI,	GB, GD, GE, GH,			
GM, HR, HU,	ID, IL, IN, IS,	JP, KE, KG, KR, KZ,	LC, LK, LR, LS,			
LT. LU. LV.	MA, MD, MG, MK,	MN, MW, MX, MZ, NO,	NZ, PL, PT, RO,			
		TJ, TM, TR, TT, TZ,				
· · · · · · · · · · · · · · · · · · ·		KG, KZ, MD, RU, TJ,				
		SL, SZ, TZ, UG, ZW,				
		IE, IT, LU, MC, NL,				
		GW, ML, MR, NE, SN,				
		CA 2001-2414976	· ·			
		AU 2001-71018				
		JP 2001-203519				
		EP 2001-949909				
		GB, GR, IT, LI, LU,				
· · · · · · · · · · · · · · · · · · ·	LV, FI, RO, MK,		,,,			
		US 2003-332023	20030102			
PRIORITY APPLN. INFO.:		JP 2000-206865				
		WO 2001-JP5784				
OTHER SOURCE(S):	MARPAT 136:8581		23010701			

GI

AB A G-protein-coupled receptor (GPR14) antagonist comprises compds. represented by the formula (I) or a salt thereof (wherein Ar represents optionally substituted aryl; X represents a spacer consisting of 1-4 atoms in the straight chain moiety; n is an integer of 1 to 10; R represents hydrogen or an optionally substituted hydrocarbon group, provided that R may be bonded to the substituent of Ar to form a ring; and Y represents optionally substituted amino or N-containing heterocyclyl). These compds. are antagonists of orphan receptor GPR14 protein (urotensin II receptor) and are useful as inhibitors of vasoconstriction for the prevention or treatment of hypertension, arteriosclerosis, cardiac hypertrophy, myocardial infarction, or heart failure. Thus, a mixture of 4-bromo-1-[3-(2,2,2-trifluoroacetyl)-2,3,4,5-tetrahydro-1H-3-benzazepin-7yl]-1-butanone, 1-phenylpiperazine, K2CO3, and DMF was stirred at 80° for 2 h, followed by treatment of the product with a mixture of 1 M aqueous KOH and methanol and then with 1 N HCl/EtOAc to give 4-(4-phenyl-1-piperazinyl)-1-(2,3,4,5-tetrahydro-1H-3-benzazepin-7-yl)-1butanone trihydrochloride (II). N-(2-{4-[bis(4fluorophenyl)methyl]piperazin-1-yl}ethyl)-2,3,4,5-tetrahydro-1H-3benzazepine-7-carboxamide trihydrochloride in vitro showed IC50 of 1.7 nM for inhibiting the binding of [125I]urotensin to human GPR14. A capsule and a tablet formulation containing II were prepared

```
10/500,517
```

IT 387875-68-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tetrahydrobenzazepine derivs. as GPR14 antagonists and vasoconstriction inhibitors for treatment and prevention of hypertension, arteriosclerosis, cardiac hypertrophy, myocardial infarction, or heart failure)

RN 387875-68-5 CA

CN 1-Butanone, 4-[4-(phenylthio)-1-piperidinyl]-1-(2,3,4,5-tetrahydro-1H-3-benzazepin-7-yl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 387875-67-4 CMF C25 H32 N2 O S

$$\begin{array}{c|c} & & & \\ &$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

REFERENCE COUNT:

10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 10:37:58 ON 14 MAR 2007)

FILE 'REGISTRY' ENTERED AT 10:38:04 ON 14 MAR 2007 L1 STRUCTURE UPLOADED L2 1432 S L1 FULL L3 STRUCTURE UPLOADED STRUCTURE UPLOADED L4 L5 806 S L3 FULL L6 901 S L4 FULL L7626 S L2 NOT L5 L8 531 S L7 NOT L6

FILE 'CA' ENTERED AT 10:40:11 ON 14 MAR 2007

L9 111 S L8

L10 57 S L9 AND PY<2001 L11 66 S L9 AND PY<2002 10/500,517

L12 45 S L9 NOT L11

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

STN INTERNATIONAL LOGOFF AT 10:41:59 ON 14 MAR 2007